



Expert questions Uttar Pradesh pollution 'breakthrough'

The central pollution control board of the Indian state of Uttar Pradesh claims to have come up with a new, salt-free method of preserving hides and has talked of compelling tanners to put the new technology into practice. But a seasoned industry observer has expressed doubt about the viability of the idea.

A former chairman of the Council for Leather Exports in India, Srinivasan Sampath Kumar, has questioned an announcement in June from the Central Pollution Control Board of the state of Uttar Pradesh, that it has devised a new way of preserving raw hides without using salt. The tanning industry in Uttar Pradesh has faced what many in the industry regard as unfair criticism for the levels of pollution in the River Ganges. The Central Pollution Control Board said its new method for preserving hides would greatly reduce pollution, and that it intended to patent the idea.

he environment minister for Uttar Pradesh, Jairam Ramesh, presided at a launch ceremony in June for what the Indian state described from the outset as new green technology that will help it improve the quality of the water in the River Ganges thanks to its impact on industrial processes in the region, including leather production.

Uttar Pradesh has large numbers of tanneries in Jajmau, Unnao and Banthar. According to Mr Ramesh, they use a combined total of about 3,000 tonnes of salt each day to preserve 5,000 tonnes of raw hide. "Close to 90% of this salt finds its way into the Ganges and groundwater, leading to pollution and contamination," he said.

The environment ministry's central pollution control board (CPCB) developed the technology, which centres on a process it calls lyophilisation. It will enable salt-free preservation of hides, CPCB claims. And according to the minister the new process will also mean tanneries use less water. He hinted that the Uttar Pradesh could make use of the new technique compulsory at some point in the future.

After the news appeared on leatherbiz.com, Mr Kumar, who runs Titan Leathers in Kolkata and is chairman of the board of governors at the college of leather technology in the same city, got in touch to say that the technology in question,



In India, raw material often has to wait several weeks, pass through several hands and endure harsh heat and humidity before reaching the tannery.

CREDIT: WTP

lyophilisation, is "neither new nor innovative" as lyophilisation, or the deep freezing of material to below minus-40 Celsius, is a much-followed technique in the pharmaceutical and biochemical industries.

He said: "Firstly, despite its importance as a processor of by-products of the meat industry, and as a livelihood provider for the economically and socially backward millions in rural India, or even as an important export segment, the leather industry suffers greatly from image deficiency, and is known more as a polluter, an image that is not restricted to India alone and is a

The state of Uttar Pradesh wants new technology to help it treat pollution and improve the quality of the water in the River Ganges.

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global phenomenon. Feeble attempts by one or other country in attempting an image make-over have had little impact so far."

He said India could only dream of putting lyophilisation in place for hide collection and storage. It is the seventh largest country in the world, with a total area of nearly 3.3 million square kilometres. "Nearly 50% of the hides that arrive in the tanneries are from fallen cattle, often pulled by carts away from human habitats for several kilometres, to be flayed by a particular community," Mr Kumar continued. "We are talking about several thousands of such lyophilisers criss-crossing the country burning fossil fuels both for their access to the collection sites as well for the deep freezing of several tonnes of hides under low pressure conditions to sub-forty degrees Celsius."

"With due respect to the Central Leather Research Institute, my enquiries revealed that they too have little experience of

lyophilisation and its impact on the protein matrix at such low temperatures. The impact on such hides through the journey, from the flayer to the collector, to the agent to the wholesalers, from the hide markets to the tannery, often stretching over several weeks, through hot humid climate conditions or incessant rains has not been studied either."

Mr Kumar also pointed out that a cost comparison between treating the salt in preserved hides at the effluent treatment plant stage with the energy consumption costs of lyophilisation needed to be initiated. He believes the action of the pollution control department in sending out a notice to tanneries to stop sourcing salted hides was too sudden.

"Pollution is a global subject and the international tanning industry must unite to invest in the global chase for greener adaptable technologies," he concluded. ☉

