

# Foreign trade and the artisans in colonial India: A study of leather

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Most kinds of crafts in mid-nineteenth century India can be classified into two types: commodities and non-marketed services.<sup>1</sup> Whether a craft functioned as a service or as a commodity depended on the product and on the producer's caste. Leather and agricultural implements were industries for which a clientele outside the village, or a market inside it, seem to have been rare. On the other hand, in textiles it was caste that usually distinguished the sellers of a commodity from the providers of a service. The coarse weaving practised by the 'menial' castes of central India was part of the diversified services these castes were supposed to perform for the village. They were not 'weavers' by caste, and the fact that they rarely specialised as weavers on leaving the village, would suggest that there were implicit barriers to their specialising. In contrast, weavers by caste freely sold cloth, whether at the village bazaar or to the merchant engaged in long-distance trade, and when migrating tended to settle, and were settled by local rulers, as weavers.<sup>2</sup>

Both sorts of crafts were transformed in the colonial period, though historians have been mainly concerned with textiles, an industry already commercialised. On textiles, recent scholarship has argued that expansion in trade and infrastructure in the second half of the nineteenth century did

<sup>1</sup> By 'service' here is meant serving a patron or benefactor and not the activities that constitute the tertiary sector. 'Service' is opposed to 'commodity' which refers to any product of labour that is sold. The distinction is generally useful in classifying craftsmen's labour, but can become blurred under fairly rigid contracts that leave the producer with little independence.

<sup>2</sup> Artisan castes in this sense were typically those identifiable with the manufacture and trade of specific products. Over sufficiently long periods of time, these identities and the correspondence between caste and occupation could evolve. The identities assumed here, therefore, are legitimate only in the context of the late nineteenth century conditions.

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not quite destroy Indian weaving, but induced institutional and technological changes by integrating markets, making labour mobile and hastening urbanisation.<sup>3</sup> This line of reasoning obviously lends itself to generalisations. Trade, markets and railways might well have transformed a whole range of industries in the same way as they did weaving and, more importantly, could have commercialised the more or less custom-bound services, thus forcing the rural society to adapt.

Leather was probably the most important of the quasi-services that became commercialised during the colonial period. The following description in Watt's *Dictionary of Economic Products* can be taken to be fairly typical of the industry as it existed before the 1860s in most parts of India:

Each village has its own workers in leather, who are also, to a large extent, their own tanners; and it is part of their recognized duties to keep their patrons in boots, and to cure and make up the hides required for the leathern buckets made for irrigation.<sup>4</sup>

Domestic trade was not absent, for there was an urban and an army demand for leather, but this was relatively small. The situation was vastly different in the last decade of the century. By then, India was one of the world's largest exporters of tanned hides and an importer of boots and shoes from Europe. The scale of export trade, at Rs 60 million in 1890, was many times that of domestic rural-urban trade, estimated at Rs 8 million by a source cited in Watt.<sup>5</sup> The change was an outcome of expansion in the leather industry and improvements in tanning technology in the West. It is tempting to say that leather was an example of India turning into a raw material supplier and finished goods importer in the world market. But that would be a trivial conclusion, besides being a half-truth.

First, the process was not complete, and imports replaced domestic leather goods to a very limited extent. Second, the real impact of trade was felt not in the extent of specialisation, but in the way technologies and production relations in both tanning and leather working changed at the

<sup>3</sup> See Konrad Specker, 'Madras Handlooms in the Nineteenth Century', *The Indian Economic and Social History Review*, (hereafter *IESHR*), Vol. 26 (2), April-June 1989, pp. 131-66; Sumit Guha, 'The Handloom Industry of Central India: 1825-1950', *IESHR*, Vol. 26 (3), July-September 1989, pp. 297-318; Peter Harnetty, 'Deindustrialization Revisited: The Handloom Weavers of the Central Provinces of India', *Modern Asian Studies* (hereafter *MAS*), Vol. 25 (3), 1991, pp. 455-510; Haruka Yanagisawa, 'The Handloom Industry and Its Market-structure: The Case of the Madras Presidency in the First Half of the Twentieth Century', *IESHR*, Vol. 30 (1), January-March 1993, pp. 1-28; Douglas Haynes, 'The Dynamics of Continuity in Indian Domestic Industry: Jari Manufacturing in Surat, 1900-47', *IESHR*, Vol. 23 (2), April-June 1986, pp. 127-49; T. Roy, *Artisans and Industrialization. Indian Weaving in the Twentieth Century*, Delhi, 1993.

<sup>4</sup> George Watt, *A Dictionary of Economic Products of India*, London, 1890, p. 613.

<sup>5</sup> An estimate based on data in *Review of the Inland Trade of India*, 1888-89, cited in *ibid*.

imperative of a much enlarged market. And third, for some of the most numerous and exploited castes, the process involved a social transition as the market opened up avenues of mobility which the society had previously denied them.

The present article will sketch this transition in broad outline. The processes described here seem to have been taking place over a large region integrated by trade and transportation, though detailed regional histories can qualify this impression. The period begins about the 1870s, when exports increased rapidly, and ends before the Second World War. The essay is divided in three sections: the first describes the producers and the technology prior to the expansion in the export trade; the second shows how exports affected tanning, in particular, by creating a market for the tanner's labour, and how technologies responded to the merchants' need to control quality; the third outlines changes in leather manufactures in response to increased competition and shortages of raw material. A concluding section connects up recent advances in textile history with features of the leather industry to develop hypotheses about crafts as a whole.

#### Tanning as it was

A rough outline of the state of leather manufacturing in the early nineteenth century would be as follows. Tanning was almost wholly a rural industry. The government-owned urban slaughterhouse was a later institution, so the raw hide came exclusively from 'fallen', that is, naturally dead cattle or *murdari* as opposed to *halali* in north Indian trade parlance. Such cattle were, of course, all rural. The 'green' hide, or the hide in raw state, if not cured within a few hours of death becomes irretrievable as leather. The risk is so great that even in the age of the railways, the green hide was never transported. This necessitated the tanner, who was usually the curer, to stay in close proximity to the cattle population.<sup>6</sup> The tanning substances, moreover, grew in the wild, were collected by the craftsmen and were rarely traded. Bark of the ubiquitous *babul* (*Acacia arabica*), nuts of myrobalan (*Terminalia chebula*), bark of the south's *avaram* (*Cassia auriculata*) were the best-known tannin, whereas curing was usually done with saline earth.<sup>7</sup> The raw material frequently drew tanning into the neighbourhood of forests, which in turn led to the somewhat more delicate industry in skins

<sup>6</sup> This also explains the stubborn persistence of crude curing methods even as tanning came to the towns.

<sup>7</sup> The tannin just mentioned were the 'big three', whose usage continues to date. Other considerably popular tannin included several varieties of Acacia, particularly *cutch* and wattle barks. A detailed description of processes and materials can be found in M.V. Edwards, R.L. Badhwar and A.C. Dey, *The Vegetable Tanning Materials of India and Burma*, Indian Forest Records (New Series), Chemistry and Minor Forest Products, Vol. 1 (2), Delhi, 1952. However, by the time this informative report was published, some indigenous processes had become extinct.

of wild animals. Thus, regions like the northern borders of Rajputana and parts of Kumaon Himalayas became famous for *sambar* and *kakar* skins, further strengthening the contact between tanners and the forest.<sup>8</sup> In the largely forested regions like the Central Provinces:

the tanning Chamars are frequently to be found in a separate little hamlet, the huts of which form a ring, in the middle of which are set the pits, wells and large earthen vessels, belonging to the trade. These settlements are generally in the neighbourhood of *malguzari* jungles, whence the supply of tanning material can be drawn.<sup>9</sup>

The 'respectable distance from the villages of the caste people'<sup>10</sup> was universal and necessitated by the Hindus' aversion to the craft because of its association with flesh, while the Muslims found the Chamars' habit of keeping 'that foul beast, the pig', equally offensive.<sup>11</sup> Within the colony, there was a tendency towards cooperative work and using the pits jointly. Similar descriptions of the tanners' colony suggest that while the craft needed space, it was perpetually constrained by limited access to it.<sup>12</sup>

The rural location of tanning was reinforced by caste. The Chamars of the northern plains from Bengal to Punjab, the Mahars (Dheds) of central India and Gujarat, the Dhors of Bombay Deccan, the Madigas of the Telugu countryside, and the Chakkiliyans of the Tamil country, were castes that performed a variety of services in the village. Coarse weaving was one of these, agricultural labour in the busy seasons was another, scavenging and associated leather processes were a third.<sup>13</sup> The Chamar was known to thatch roofs and occasionally carry palanquins. The Chamarin was a midwife. The tanning castes were also found to be the village

<sup>8</sup> A. C. Chatterjee, *Notes on the Industries of the United Provinces*, Allahabad, 1908, p. 99; Government of United Provinces, *Industrial Survey of the United Provinces*, Allahabad, 1924, Almora District report.

<sup>9</sup> Government of the Central Provinces and Berar, *Report of the Industrial Survey of the Central Provinces and Berar*, Nagpur, 1908-1909.

<sup>10</sup> A. C. Chatterton, *A Monograph on Tanning and Working on Leather in the Madras Presidency*, Madras, 1904, p. 10.

<sup>11</sup> W. Crooke, *The Natives of Northern India*, Archibald Constable, London, 1907, p. 122.

<sup>12</sup> 'Village chamars have to depend upon zamindars to have a suitable place for their tanning . . . For a small man in the villages it is not easy . . . and the tanner will have to pay . . . heavy penalty.' This statement appears in Chowdhary Mukhtar Singh, *Cottage and Small-Scale Industries*, Kitabistan, Allahabad, 1947, p. 156. The author, however, did not substantiate it.

<sup>13</sup> Apropos the tanners' involvement in agriculture, occasional references in the caste anthologies used in this paper suggest that the various ways the leather castes were paid back by their patrons included crop share and/or rights to rent-free land. In some areas this seems to have evolved into tenancy of an undefined sort, though usually the tanners were field labourers. See, for example, H. V. Nanjundayya and L. K. Ananthakrishna Iyer, *The Mysore Tribes and Castes*, Mysore, 1931, Vol. IV, 'Madiga'.

musicians, performing at festivals.<sup>14</sup> Denzil Ibbetson, author of a book on Punjab castes, hypothesised that the integration of the vagrant and the tribal into settled rural life involved an evolution wherein scavenging, tanning and weaving were adjacently placed occupations. In 1916, he could observe various stages of this process completed in the Gangetic plains.<sup>15</sup> Coarse weaving and tanning did not require great skills and hence a specialist artisan caste. They were also ideal as off-season employment for agricultural labour. The Mahar was additionally the village watchman and the general purpose labourer, commandeered 'whenever a pair of shoulders are required to bear some burden, it may be the revenue records from field to field or a petty official's kit.'<sup>16</sup> As if to justify their function in rural society, the tanners also invariably carried a degraded image. There is, in fact, a surprising constancy in this image across distant regions in India.<sup>17</sup>

When a cow died in a central Indian village, the owner tied it on a rope, dragged it as far to the edge of the village as he could, and informed the Mahar. The latter then dragged it out of the village and flayed it. He could

<sup>14</sup> The Madigas were known to play the drum, see Chatterton, *Monograph on Tanning*, p. 10; the north Indian Chamar was a drum-player too, see William Crooke, *The Tribes and Castes of the North-Western Provinces*, Vol. II, Calcutta, 1896, p. 196. There are many other sporadic instances of the link between tanning and music, of which perhaps the most extraordinary is the following. Descriptions of the central Bengal silk industry, c. 1900, mention the prodigiously talented Dubraj. He was a Chamar in origin, began his life as a drummer, turned into a composer of verse though he was not literate, became the leader of a 'gang of *impromptu* singers (*Kabis*),' and later in life, apprenticed himself to a Muslim weaver of Baluchar. At his death, Dubraj was the most famous master-weaver in figured patterns. See N.G. Mukherji, *A Monograph on the Silk Fabrics of Bengal*, Calcutta, p. 42. This link, indeed, carries an insight into an unwritten side of rural life. Technologically, the association is obvious: the making of drums and several other instruments involved tanning skins or working with guts. It is, therefore, possible that tanners tended to make instruments and then became musicians themselves. It is also possible that tanners by caste were recruited from musicians, indicating probable tribalist roots of tanners in some areas. There is involved here a problem in the evolution of products and occupations: which leather article came first, the water-bag used by the peasants for irrigation or the prehistoric drum?

<sup>15</sup> Thus:

The Khatik who is a scavenger in the east turns into a tanner in the west; we see the Koli Chamar abandon leather-making and take to weaving, and turn into a Chamar-Julaha or Bunia; we see that in some districts most of the Mochis are weavers rather than leather-makers.

Denzil Ibbetson, *Punjab Castes*, Lahore, 1916, p. 267. Consistent with this hypothesis, the vagrant Paraiyans of Madras were increasingly turning towards leather over the period of the 1911-31 censuses.

<sup>16</sup> M.L. Darling, *Wisdom and Waste in the Punjab Village*, Bombay, 1934, p. 265.

<sup>17</sup> They were 'wily, filthy, and of low morals,' as numerous north Indian proverbs about the Chamar expressed. Proverbial too was the landed and other upper castes' weakness for the Chamarin or her southern counterpart. Two representative compilations of proverbs and lore are, Herbert Risley, *The People of India*, Calcutta, 1908; and Edgar Thurston, *Tribes and Castes of Southern India*, Madras, 1909, under 'Chakkiliyan'.

'keep the hide free in return for services performed for the village community.<sup>18</sup> The hide was then cured and either tanned by the scavengers themselves, or sold to tanners. The latter, in turn, were themselves duty-bound to supply their 'patrons' with a fixed number of shoes, ox-goats and irrigation implements, or sold the leather to the leather workers, who were thus duty-bound. The intervention of a market, or the extent of division of labour, seem to have depended on the region and, relatedly, on the tanning processes followed in the different parts. In the villages of the northern plains, the three actors quite often collapsed into one caste, the Chamar.<sup>19</sup> The Madigas and the Chakkiliyans of the south too were frequently leather workers as well.<sup>20</sup> In Gujarat, flayers and tanners merged, but leather artisans, Mochis, were distinct. In the Deccan, flayers were the Mahars, tanning was done by the Dhors, and leather was the Chamars' responsibility.<sup>21</sup> This increased division of labour might account for the great reputation of Dhor bag tannage in the Satara-Poona area, the origin of the Kolhapuri sandal. Wherever division of labour was elementary or absent, the tanner was engaged in making the simplest kind of articles with an essentially local demand, chiefly the water-bag (*mote*) for irrigation and, occasionally, crude footwear. On the other hand, the separation between tanners and leather workers was decisive whenever the article involved some sort of skill, decorated footwear, for example, and had an urban clientele.

It was this last stage in the leather chain, manufacture of finished goods, that was considerably more commercialised and dispersed. The leather craftsman, the Mochi, was also socially better off, as he did not have to touch flesh. The product that seems to have been the most thoroughly integrated into urban trade was a covered footwear with or without decoration, the indigenous shoe appearing universally as one made of reddish leather with a curled front, thin sole and covering the feet to a little above the toes. This ubiquitous article was nowhere a mass consumable or working, class attire, but was worn by the relatively wealthy, the city-dweller, or anyone respecting 'the unwritten ordinance which permits [the native] to doff shoes . . . when in the presence of a superior.'<sup>22</sup> In rare instances, this curled shoe was made in craft towns, came in contact with forms of local

<sup>18</sup> *Industrial Survey, Central Provinces*, p. 58.

<sup>19</sup> For customary exchanges in Punjab, see Darling, *Wisdom and Waste*, p. 265; in United Provinces, Chatterjee, *Notes on the Industries*, p. 99. In the 1870s, the leather artisan, Mochi, existed as a separate caste only in the towns of northern India, whereas the three occupations, flayer, tanner and leather artisan, tended to converge in the villages, see M.A. Sherring, *Hindu Tribes and Castes*. Vol. II, 1879, 'Chamar', 'Mochi'.

<sup>20</sup> Chatterton, *Monograph on Tanning*, pp. 10-11.

<sup>21</sup> A. Guthrie, *Report on Leather Industries of the Bombay Presidency*, Bombay, 1910.

<sup>22</sup> T.N. Mukharji, *Arts and Manufactures of India*, Calcutta, 1888, p. 302. Mukharji, the author of this eminent book, was a curator of the Indian Museum at Calcutta.

embroidery, with artisans engaged in gold thread making, and was transformed into a richly designed object. Lucknow had developed this craft of gilded and embroidered shoes to excellence; other examples of a fusion between footwear and *zari* come from Jaipur, Delhi, Raichur and Chanda.<sup>23</sup> Lucknow, in the process, had become 'a hide emporium from which exports are made.'<sup>24</sup> Further, many northern towns housed garrisons which needed the leather craftsmen for saddlery and harness. The cities also used leather jars to carry ghee and oil, these bags were, in the 1880s, 'familiar to every one who has once passed through an Indian bazaar.'<sup>25</sup> In Gujarat, an ancient sea trade in both unwrought and worked leather survived till the early colonial period. The best-known description of this trade belongs to Marco Polo who had noticed, among other objects, 'unicorn' hides in the merchandise. Nevertheless, references to leather goods entering long-distance or urban trade remain rather rare; the final output of the leather artisan was usually rural. Tanned hides and skins are not commonly encountered objects in internal trade prior to the railways; there may well have been an aversion to carrying such goods over long distances.

The tanning processes were exceedingly simple, even if backbreaking, partly explaining the ease with which tanning could be combined with other labour; also they varied relatively little. Flaying was usually done with a short and sharp knife called *rampi*. This implement, considered much too sharp by observers of the practice,<sup>26</sup> acquired a certain notoriety in the nineteenth century as increasing 'butcher's cuts' impaired the worth of the exportable hide. The shape of the knife had somewhat earlier changed in Europe. Curing was done by either sun drying, or salting the hide. In the first case, the hide was merely left in the sun, flesh side up, for several weeks till it was completely drained of moisture and bacteria. The process yielded a crumpled and hard substance, so hard that the subsequent soaking and softening became difficult and hazardous.<sup>27</sup> A better method was air drying where the hide was stretched on a frame and kept under shade. But the most preferred by tanners was a salt cure where salt solutions were painted repeatedly on the flesh side of the hide. But as neither eating salt, nor frames, nor artificial shade was accessible to the average village curer, the larger part of Indian hides were *sukties*, or sun

<sup>23</sup> *Ibid.*, pp. 301–302.

<sup>24</sup> William Hoey, *A Monograph on Trade and Manufactures in Northern India*, American Methodist Mission, Lucknow, 1880, p. 27.

<sup>25</sup> See *ibid.*, p. 138, on the *kuppasaz*, the maker and seller of leather jars in Lucknow. In Punjab, the craft involved a group of artisans who once functioned almost like a caste, but appear to have become extinct through the inter-War censuses, see Ibbetson, *Panjab Castes*, pp. 301–302.

<sup>26</sup> For a reference, see Government of Bombay, *Report of the Bombay Leather Survey*, 1960, Bombay, p. 21.

<sup>27</sup> Government of India, *The Hides Cess Enquiry Committee*, 1929, Vol. II (Evidence), M.B. Hudlikar, Harcourt Butler Technological Institute, Cawnpore (Kanpur), pp. 54–55.

dried. It is reported in at least one source that circa 1880–1914, the usual method of curing in India tended to shift from wet-salted to dry.<sup>28</sup> This remains rather an isolated statement, but, if true, the tendency can be explained in terms of a preference in the export market for raw hides with the minimum of processing, and possibly, a desire to avoid false weights added via wet-salting, ‘a native science’.

Tanning began with preliminary soaking, first in water to desalt the skin, then in lime solutions to remove hair, a stage avoided with skins of wild animals, and finally in tannin solutions, under close and extremely long contact with the bark of the required tree. The skin was placed between barks, and soaked in bark solutions, ‘good, strong liquor’ as they were called in the European tanneries, with the solution periodically changed and made stronger. This process could either happen in a pit, or the skin was sewn up in a bag containing the solution which was repeatedly changed. Lastly, the leather was finished, that is, oiled, smoothened, sheared and dyed. The longer the soaking the better for the hide, but in villages the processes could, in fact, be much simpler: the skin was merely wrapped in bark and soaked in water and almost never finished. On an average, the tanning process took about 30–50 days to complete, though the time depended on the material used, the state of the cured hide, and on whether the process involved bag or bark tanning, the former being somewhat quicker. By the end of the nineteenth century, chrome tanning had been invented in the US, cutting down the time to as little as a day. In India, Alfred Chatterton, technical adviser to the Madras government, introduced it in demonstrations.<sup>29</sup> But not until the First World War did chrome tanning become popular, and even then it was practised only in factories in a few towns. It needed large investments; imported tannin, and the leather cost more (it was also longer lasting). But even if not popular locally, the global stride of chrome tanning did affect the demand for Indian hides in the world market, as we shall see.

A slow transition in the old state of affairs began in the 1830s with the first exports of Indian hides to Europe. That India had a surplus to sell to the world was well-known. In a short and informative monograph about Bengal written in 1804, the civil servant Colebrooke argued the possibility of England replacing her supplies of hides from Brazil by those available in Bengal.<sup>30</sup> But it was not until the 1870s that trade surged. In fact, several circumstances combined in one decade to create this boom that did not

<sup>28</sup> Imperial Institute Committee for India, *Reports on Hides and Skins*, London, 1920, p. 90.

<sup>29</sup> On this initiative, see Padmini Swaminathan, ‘State Intervention in Industrialisation: A Case Study of the Madras Presidency’, *IESHR*, Vol. 29 (4), October–December 1992, pp. 479–506.

<sup>30</sup> H.T. Colebrooke, *Remarks on the Husbandry and Internal Commerce of Bengal*, Calcutta, 1804, p. 115.



seem to wane till long afterward. The growth owed much to the repeal of a 3 per cent export duty on hides in 1875. Public auctions in hides began in London about this time. Trade in hides was 'immensely stimulated' during and after the devastating southern famines of 1876-77 and 1896.<sup>31</sup> The decade witnessed substantial progress in the trunk railways connecting Madras, Bombay and Calcutta with the major hides- and skins-producing regions. Germany's advances in mineral dyeing, again a contemporary development, made her the only country able to manufacture coloured leather. The conclusion of the Franco-Prussian war and resumption of normalcy saw Germany re-enter the world market. In the last quarter of the century Germany and Austria were the main buyers of Indian raw hides, a trade organised by a group of 'German or quasi-German' firms based in Calcutta and forming a strong cartel.<sup>32</sup> In America at the same time, chrome tanning created a demand for raw or semi-tanned hides for which India was the ideal source.

India possessed the largest cattle population in the world, and despite the near absence of meat consumption and hence of slaughtering, India had one of the world's largest supplies of hides and skins due to high natural mortality. From 1890 onwards, leather constituted 5-9 per cent of total private merchandise exports, though the composition was changing gradually from cured to tanned and, later, to processed leather (Table 1). The importance of the trade dropped sharply after the Great Depression. But by then, the creation of a single market for Indian hides had forced traders to intervene in tanning to regulate internal supply and quality.

### **The Effects on Tanning**

Two changes, both locational, are immediately discernible. First, the direction of internal trade changed. The major source of raw hides was always the region formed of Punjab, the United Provinces and Central Provinces, and west Bihar. If earlier tanning was mainly local, now undressed hides

<sup>31</sup> See J.R. Martin, *Monograph on Tanning and Working in Leather in the Bombay Presidency*, Bombay, 1903, p. 4 on famine mortality forcing exports. Generally on the significance of the decade, 1870s, see also Chatterton, *Monograph on Tanning*, p. 4.

<sup>32</sup> The cartel, which apparently dominated foreign trade in Indian hides, was broken in the First World War. The subsequent trade history is briefly as follows. During the War, the British tanners realized the worth of Indian supplies, and got the Imperial Institute to write a plea for a discriminatory export duty on Indian kips under the Imperial Preference. The Institute obliged, 'imperial interests demand that the trade . . . should be . . . securely in the hands of British firms', Imperial Institute, *Reports on Hides and Skins*, p. 5. In 1919, a duty of 15 per cent was imposed, with a 10 per cent rebate for export within the empire. The duty does not seem to have destroyed German trade which did revive, but possibly pushed it towards the better grades of hides, *Minutes of Evidence Recorded by the Indian Fiscal Commission*, Calcutta, 1923, p. 351. Also, the trader composition almost certainly diversified in the inter-War period, with more British and American participation, and the rise of Indian firms who had started as subcontractors of the Germans. More on this last tendency later.

Table 1  
Export of Hides and Skins by Sea, 1890-1939  
(Quinquennial Averages)

	Cured		Tanned		Unwrought leather		Hides in export value <sup>2</sup> (%)	Unit value index	Terms of trade <sup>3</sup>
	'000 tonnes	Rs m'	'000 tonnes	Rs m'	'000 tonnes	Rs m'			
1890-94	43.9	83.5	*	*	-	-	5.3	100	1.0
1895-99	62.3	91.0	*	*	-	-	6.6	77	0.7
1900-1904	58.2	71.0	15.2	32.0	-	-	5.4	74	0.7
1905-1909	67.2	92.1	16.2	48.4	-	-	8.4	88	0.6
1910-14	74.5	99.5	16.3	44.3	-	-	6.6	83	0.6
1915-19	55.8	130.0	24.4	87.1	-	-	8.9	142	0.8
1920-24	44.4	61.2	13.8	51.3	-	-	4.6	101	0.5
1925-29	57.0	81.5	20.9	81.6	-	-	5.0	110	0.5
1930-34	11.4	11.7	3.4	10.6	0.3	1.2	1.4	81	0.7
1935-39	13.1	13.4	4.5	11.5	1.3	5.2	1.7	84	0.8

Source: *Review of Seaborne Trade of British India*, various years.

Notes: \* Included under cured.

1. Figures are available in pound sterling. They have been converted into rupees at the current exchange rates. Exchange rates were Rs 15 to a pound during 1890-1917, Rs 13.3 during 1926-39 and floating in between.
2. Unit value index is average for all products.
3. Terms of trade is unit value index as a ratio of weighted agricultural prices.

(cattle) began to move out of this region towards Calcutta and Bombay and undressed skins (goats and sheep) from the north as well as the south towards Madras. Second, as a natural development, tanneries were set up at the ports and major points of hide trade. The opening of the trunk railways was a clear inducement for this movement. Railway stations at source had special godowns for hides. The agents of merchants in the port cities operated at these points; Bombay's merchants, for example, had agents stationed as far as Peshawar, Rawal Pindi, Aligarh and Agra. The gradual decline in the proportion of cured hides, that is, sun dried in the village, in total exports (Table 1) is a rough indicator of the urbanisation of the industry. Indeed, the relative impact of the railways in facilitating trade was possibly much stronger in tanning than in any other industry. For, the country tanner was known to have virtually no access to traditional modes of transportation.<sup>33</sup>

But merely a wide transport network was not sufficient in itself. A steadily expanding trade cannot rely on famine mortality nor on natural death rates of animals. The market would eventually need to exercise control on mortality, possible only through slaughterhouses. Centralisation of slaughtering was also needed to control quality, since the major defects in Indian hides arose from bad flaying. Municipal slaughterhouses were set up from about the end of the century, and were in a flourishing state in the 1920s. Slaughtered cattle tended to provide better hides than fallen cattle not only due to flaying but to the quality of the animal itself. The hide of a fallen cattle was a mere gift of nature, and came from starved and diseased animals. The slaughterhouse, on the other hand, was a business, the prospects of which improved with the possibility of developing a market for meat. This was the second condition for their success. In the early twentieth century an export trade to Burma developed in dried oxen and buffalo meat, and major slaughtering centres in the United Provinces specialised in this trade.<sup>34</sup> Roughly about one-fourth of the estimated 20 million hides produced annually in the early 1920s came from the slaughterhouse.<sup>35</sup> This was a direct inducement for tanneries to develop in the towns. Centralised slaughter created a network of merchants to collect dry cattle from the villages. It allowed the urban tanneries to avoid middlemen and contract directly with the butchers. It also allowed them to avoid, though partially, the badly cured hides from the villages and to modernise processes.<sup>36</sup>

<sup>33</sup> Even as late as the 1950s, the village tanner encountered great resistance to carriage of his wares by bullock carts, and had to pay higher charges, 'whatever demanded by the vehicle owner,' Central Leather Research Institute, *Symposium on Tanning as a Small Scale and Cottage Industry*, Madras, 1959, p. 28, in W.N. Pandav's article on Bombay state.

<sup>34</sup> *Hides Cess Enquiry*, Vol. II, evidence of Forrester Walker, Government Harness and Saddlery Factory, Kanpur, pp. 20-21.

<sup>35</sup> *Hides Cess Enquiry*, Vol. II, evidence of P.J. Kerr, Veterinary Advisor to the Government of Bengal.

<sup>36</sup> *Hides Cess Enquiry*, Vol. II, evidence of Mehtab Singh, Industrial Surveyor, Delhi, p. 484; and of bark tanners of Pallavaram, p. 300.

For the remaining supplies that still came from 'deads', a major redefinition of caste roles was under way with the creation of a market. First of all, flaying was more rarely the right or duty attaching to castes. In some cases the caste involved refused to accept the duty,<sup>37</sup> in others their patrons refused to part with a product that had now acquired a price. And at the spiritual level, 'revulsion to consume the carcasses of dead animals is gaining ground'<sup>38</sup> among the scavengers, as a signal to society at large. The customary exchange was breaking down everywhere. In central India, 'owners of cattle are less disposed to . . . [the] custom [of gifting away carcasses].' Briggs observed in the north that 'the increased value of leather has led the landlord to question the chamars' traditional right to raw skin.' Thurston noticed the tendency of the ryots 'to dispense with the services of family Madigas, and resort to the open market.' Or, if the hide was transferred to the Madigas, to demand payment. The Madigas themselves began to 'poach on each other's monopoly of certain houses.' In Bombay, the traders tried to enforce a market by insisting that the tanners enter into a bond promising not to acquire hides except from the traders.<sup>39</sup> The extent of the change can be conveyed by comparing this situation with Colebrooke's statement in 1804, when 'the currier often neglects to take the hides.'<sup>40</sup> By the 1920s, a tannery owner in Bombay could profess ignorance about 'any custom by which the hide of the dead animals belong to the *chamars* or sweepers.'<sup>41</sup> And in the south, barring the remoter parts, the 'qualified kind of serfdom . . . has all but died out' by the early 1930s.<sup>42</sup>

There was a curious sidelight to this development. It seems that the north Indian tanner's repertoire included the art of poisoning diseased cattle. By the turn of the century, as hides were no longer plentiful in the village and customs no longer respected, rumours of its unauthorised usage were rampant.<sup>43</sup> It is not clear how far this allegation was real and how far

<sup>37</sup> In parts of Bombay, the Mahars refused to flay animals, 'due to new awakening,' *Bombay Leather Survey*, p. 11.

<sup>38</sup> So was, interestingly, refusal to play the drum on traditional occasions, Chatterton, *Monograph on Tanning*, pp. 10-11.

<sup>39</sup> These examples are from *Hides Cess Enquiry*, Vol. II, evidence of A. A. Pillai, Director of Industries, Madras, p. 332; Thurston, *Tribes and Castes of Southern India*, 'Madiga' *Industrial Survey, Central Provinces*, p. 58; Chatterton, *Monograph on Tanning*, pp. 10-11, reference to the Madigas; G. W. Briggs, *The Chamars*, Calcutta, 1920, p. 58; and *Indian Industrial Commission*, evidence of R. B. Ewbank, Registrar of Cooperative Societies, Minutes of Evidence (Bombay Volume), Calcutta, 1918, p. 546.

<sup>40</sup> Colebrooke, *Remarks on the Husbandry*, p. 115.

<sup>41</sup> *Hides Cess Enquiry*, Vol. II, evidence, Pratap Pandit, Director of Western India Tannery, Bombay, p. 388.

<sup>42</sup> Nanjundayya and Ananthakrishna Iyer, *Mysore Tribes and Castes*, Vol. IV, 'Madiga'.

<sup>43</sup> Cattle poisoning is a constant element in nearly every portrait of the rural tanner between the 1880s and the 1920s. The possibility of selling hides at the urban market was stated, or implied, to be the motivation for clandestine poisoning. One of the earliest references is, possibly, Hoey, *Monograph on Trade and Manufactures*, p. 91; see also *Industrial Survey, Central Provinces*, p. 58; E. A. H. Blunt, *The Caste System of Northern India*,

fabricated, perhaps to create a hostility that reinforced the collapse of tradition. In any case, it became an inseparable part of the image of the Chamar. 'A humorous allusion to this practice . . . may be traced to the proverb which represents the Chamar as enquiring after the health of the village headman's buffalo.'<sup>44</sup>

It is perhaps this detachment of tanning from the rural economy that shows up in a long decline in the number and proportion of traditional leather castes engaged in the craft. In northern India, according to the census, 'actual workers' employed in leather did not decline over 1901–31, though employment may have been stagnant. But participation in tanning of castes identified with leather definitely came down (Table 2). Further, in contrast with the percentages of traditional leather castes engaged in leather in northern India, the proportions were on average low in the south throughout the census period. This could be due to the entry on a fairly large scale of servile and agrarian labour castes into leather in the south.

Responding to the creation of a market for his services, the village servant was evidently specialising. All over the country, some were giving up leather to become agricultural labourers or to enter other 'cleaner' occupations, even though the options were severely limited,<sup>45</sup> and others were becoming specialist tanners.<sup>46</sup> Three sorts of avenues seemed to be open to those specialising in leather: to become subcontractors of hide merchants, to become workers in tanneries and to become traders themselves.

The Chamar who lost hereditary access to fallen cattle was often replaced by the 'contractor', the itinerant agent of the export merchant or of

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Lucknow, 1931, p. 119; Briggs, *The Chamars*, p. 235; Watt, *Dictionary*, p. 248. A little packet of arsenic 'craftily wrapped in a leaf or a petal of the mohua- flower' was dropped where the cattle were grazing, Risley, *People of India*, p. 133. In some of these sources, Risley and Watt, for example, 'cattle poisoning' is mentioned as a profession in itself. If indeed there were specialist poisoners, nothing very much seems to be known about them. The usual allegations of unlawful use referred to the tanners who as a rule practised it on the side.

<sup>44</sup> Risley, *People of India*, p. 133.

<sup>45</sup> In the towns of Rajasthan, if Chamars or Mochis tried to become entrepreneurs or enter services like running eateries or hotels, such attempts were known to be resisted by 'Savarna Hindus', see, for example, T.S. Katiyar, *Social Life in Rajasthan*, Allahabad, 1964, pp. 24, 77.

<sup>46</sup> On western India, see *Indian Industrial Commission*, evidence of Ewbank, Bombay Volume, p. 546; on Mysore, Nanjundayya and Ananthakrishna Iyer, *Mysore Tribes and Castes*, 'Madiga'; in Punjab, the same process was observed later by Tom Kessinger, *Vilayatpur, 1848–1968: Social and Economic Change in a North Indian Village*, Berkeley, 1974, pp. 160–61. In some cases, conversion to Sikhism encouraged exit from leather, Darling, *Wisdom and Waste*, p. 265. In Punjab, the Muslim Chamars did not depend on agriculture at all, whereas large number of the Ramdasi, Hindus and Sikhs worked as farmers and labourers, Government of Punjab, *Report of the Punjab Provincial Banking Enquiry Committee, 1929–30*, Lahore, 1930, pp. 302–304. Likewise, the Madigas' refusal to perform village services followed conversion to Christianity, Chatterton, *Monograph on Tanning*, p. 10.

Table 2  
Employment in Leather (male, '000)<sup>1</sup>

	1901	1911	1921	1931 <sup>2</sup>
<b>'Actual workers' in leather</b>				
Madras	170	160	128	113
Bengal	71	45	53	32
United Provinces	—	120	130	—
Punjab	215	240	—	211
<b>Actual workers in leather from leather castes</b>				
Madras	58	—	58	—
Bengal	71	—	53	33
United Provinces	—	108	119	—
Punjab	—	226	215	178
<b>Proportion of actual workers following traditional occupation</b>				
Madras: Madiga	26	24	18	—
Chakkiliyan	18	—	13	—
Bengal: Chamar + Mochi	25	32	27	26
United Provinces: Chamar	6	5	—	5
Punjab: Charmor	—	36	35	26
Mochi	—	66	73	72

**Source:** *Census of India*, major provinces, Part II, Tables, for data on caste occupation correspondence and on employment.

**Notes:** 1. In the censuses, 'tanning' is defined as a separate order under the general class 'exploitation of materials' but leather products are variously classified by usage. The most important usage is footwear, classified under 'articles of clothing'. We have considered only this item, which implies exclusion of minor products like leather containers, etc.

2. 1931 data refer to 'earner with principal occupation as leather'.

tanneries or, in the case of live animals, of the slaughterhouse. The Chamar, however, was frequently a sub-agent, and privileged to be so, being the only one available to flay and cure the hide locally. For the same reason, the landlord to whom the cattle belonged could ask for a price but could not displace the Chamar from the trade, since the agent had an advance contract with the Chamar.<sup>47</sup> A Punjab report of 1930 found that most rural tanners still in the trade had become permanent clients of contractors. The few who could contract directly with the tanneries did noticeably prosper, but the majority were without the means to 'hold up their goods for any length of time.'<sup>48</sup>

Many others turned to the city, where newly established large tanneries needed labour and could still find only Chamars willing to work in the

<sup>47</sup> *Hides Cess Enquiry*, Vol. II, evidence of P.B. Advani, Director of Industries, Bombay, p. 401.

<sup>48</sup> *Punjab Provincial Banking Enquiry Committee*, p. 304.

tanning processes, a situation that has changed very little to the present day. The movement was something like an exodus: 'In some parts of the country as many as 25 per cent of [the male rural Chamars] are away from home half the year.'<sup>49</sup> They were not all working in the tanneries, though tanning remained the occupation where they were most naturally acceptable. Chhattisgarh Chamars were to be found in the Assam tea gardens, in the railway workshops of Kharagpur and Chakradharpur, as porters in the railway stations all over the east and, of course, as labourers in Calcutta.<sup>50</sup> Even as early as the 1870s, the central Indian Chamar was known to be very mobile, leaving the village at 'a very slight cause', but usually they tended to return.<sup>51</sup> The first half of the twentieth century, in contrast, apparently witnessed many more permanent migrations.

Since food prices were rising somewhat faster than prices of leather exported during 1890–1925 (Table 1), a preference for wage work was likely. There might have been implicit earning differentials between the city and the countryside. The cities offered a cash economy. The village services carried payments, but usually in kind, and the upper castes often reneged on these.<sup>52</sup> The tendency of cattle owners selling hides or animals directly to the slaughterhouse or its contractors gave the rural tanners, those who could not enter the trade, no option but to emigrate.<sup>53</sup> Further, many important usages of leather within the village were in decline, further loosening the tanners' ties with the village. The water-bag for irrigation was going out of use wherever newer and more centralised systems of water distribution became available. This was mentioned as one of the chief reasons for the decline of rural tanning in Gujarat, Khandesh and Marathwada.<sup>54</sup> The peasant, moreover, clearly preferred chrome-tanned leather in irrigation where he had the option, for the country-made *mote* was notorious for its short life and frequent repairs, 'leaving the ryot at the mercy of the chuckler.'<sup>55</sup> Numerous forms of household leather containers were being replaced by metalware. Plausibly, the village drums were yielding to the music of the cities as their makers themselves migrated,

<sup>49</sup> Briggs, *The Chamars*, p. 58.

<sup>50</sup> R.V. Russell and Hira Lal, *The Tribes and Castes of the Central Provinces and Berar*, Nagpur, 1916, 'Chamar'. The great melting pots, the plantations and the public works, thus performed the humane role of facilitating a disintegration of caste as barrier to entry. This process and the migrant labourer form the backdrop to Jim Corbett's unforgettable tribute to Chamari, an employee at the Mokama station in the first decade of the century, *My India*, Delhi, 1991.

<sup>51</sup> Sherring, *Hindu Tribes and Castes*, Vol. II, p. 111.

<sup>52</sup> The village tanners in Berar were paid in kind for the leather goods made, or were not paid at all, see H.R. Pitke, 'Hides and Skins Industry in Berar' in *Proceedings of the Ninth Indian Industrial Conference at Karachi*, 1913, Amraoti, 1914.

<sup>53</sup> Russell and Lal, *Tribes and Castes of the Central Provinces*, 'Chamar'.

<sup>54</sup> *Bombay Leather Survey*, p. 28.

<sup>55</sup> Chatterton, *Monograph on Tanning*, p. 42.

whereas the rural tanners were never known to be adept at the infinitely more delicate processing of guts or skins demanded by the instruments played at the courts or the temples.<sup>56</sup>

Along with all this, there was present a desire to leave the customary roles which constrained attempts to specialise. Thus, with the Chhattisgarh tanners who, by 1915, had dispersed all over eastern India, the most likely reason for 'their taste for emigration [was] the resentment felt at their despised position in Chhattisgarh.'<sup>57</sup> Even as times were changing outside, in the village, the Chamar remained 'at the beck and call of the others no matter what their own interests may be.'<sup>58</sup> The landlord, the petty officers, the upper castes all freely laid claim on their time. A revealing example of this, cited by Briggs, was that of a government servant, a Chamar, who was forced by the zamindar's henchmen on to the field when on vacation in his village. Thus, when asked his caste by the census investigator the Punjab Chamar answered 'coolie'; he was not only hiding a stigma, but also being truthful.<sup>59</sup> It is easy to see why Ewbank, when asked about the prospects of collectivising the rural Chamar into cooperatives, honestly rejected the idea: 'I would rather that the local tanners go to the tanneries at once.'<sup>60</sup> In this one instance, the craftsmen, on joining the proletariat, had nothing to lose but centuries of petrified, institutionalised degradation.<sup>61</sup>

Both the urban and the rural Chamars included examples of own-account traders. Thus, with Kanpur beginning to emerge as north India's entrepot in hides:

The extension of the leather trade . . . made it a great Chamar centre. Many of them have become wealthy and aim at a standard of social respectability much higher than their rural brethren, and some have begun to seclude their women which every native does as soon as he commences to rise in the world.<sup>62</sup>

Outside, but around the town, 'generally, hides of dead animals are collected in the villages by *chamars* and sold in the village weekly bazars.'<sup>63</sup> In the

<sup>56</sup> A brief indirect reference to this differential in skills involved in making musical instruments and its urbanising effect, appears in *Bombay Leather Survey*, p. 73.

<sup>57</sup> Russell and Lal, *Tribes and Castes of the Central Provinces*, 'Chamar'.

<sup>58</sup> Briggs, *The Chamars*, p. 56.

<sup>59</sup> Ibbetson, *Punjab Castes*, p. 297.

<sup>60</sup> *Indian Industrial Commission*, evidence of Ewbank, Bombay Volume, p. 557.

<sup>61</sup> The city-ward move, and cash economy formed the bases for movements for social and political power, see Eleanor Zelliot, 'Mahars and the Non-Brahmin Movement in Maharashtra', *IESHR*, 7 (3), September 1970, pp. 379-416.

<sup>62</sup> Crooke, *The Tribes and Castes of the North-Western Provinces*, Vol. II, p. 191.

<sup>63</sup> The various instances of Chamar enterprise in the north are from the *Hides Cess Enquiry*, Vol. II, evidence of W.C. de Noronha, tanner at Kanpur, pp. 81-82; Briggs, *The Chamars*, p. 57; and Government of Punjab, *Report of the Industrial Survey of Punjab*, Chandigarh, 1960.



smaller town of Bombay about 1910, 'there is a peculiar sort of "contract" work to be found,' wherein one Chamar supplied the physical capital (hides, bark, lime, vats) to another, and received the tanned hide 'at a price previously arranged.'<sup>64</sup> In Raipur town in Chhattisgarh, cattle dealers were usually Chamars.<sup>65</sup> In the 1890s, the Madigas of the Mysore towns were reported to 'have risen to considerable influence . . . on account of the rise in the value of skins.'<sup>66</sup> A survey in the 1950s showed that some tanneries in the Punjab towns involved Chamar capital. Already in the 1880s, the Chamars owned tanneries in Lucknow and, judging by the size of the units (multiple pits), were believed to possess substantial capital.<sup>67</sup>

The Chamar entrepreneur, thus, was not at all rare. Yet, many instances from the transition in tanning also reveal the constraints the entrepreneurs, especially the rural tanner, had to encounter. In the largest tanneries of the country, Chamar involvement was unknown except as labourers. The mobility of the Chamar was restricted by exclusion from existing business institutions. The Hindu moneylender would scarcely advance credit for tanning.<sup>68</sup> 'In Chhattisgarh, the village tanners are below the status in which more than the most trifling credit is available.'<sup>69</sup> In industrial towns, the availability of credit was a less serious problem than its price. A tanner in Hoshangabad town could get Rs 300, no small sum, thanks to 'the lender's knowledge of the extent of his transactions.' In Saugar, a banker regularly lent to the Chamars. But, 'owing to the ill odour in which such a trade is held by respectable Hindus, the dealers are not content with the smaller profits of an anna or two in the rupee.'<sup>70</sup> It would seem that the general aversion to financing tanning and the poor creditworthiness of Chamars placed a few moneylenders in a monopolistic position. Moreover, unlike textiles, in leather the finished goods would rarely be an acceptable collateral or a valid form of repayment.

Since more or less the only capital needed in vegetable tanning was large enough space, urbanisation of tanning went along with large-scale production. The export merchant turned a processor. The smaller factories, the *karkhana* typical of numerous Indian crafts, could be units worked by a few labourers, hired and supplied from within the owner's family.<sup>71</sup> At the other end, the Hides Cess Enquiry Committee reported the existence of export tanneries in the big cities employing 400 to 500 workers each.

<sup>64</sup> Guthrie, *Report on Leather Industries*, p. 19.

<sup>65</sup> Russell and Lal, *Tribes and Castes of the Central Provinces*, 'Chamar'.

<sup>66</sup> Mysore census, 1891, cited in Jogendranath Bhattacharya, *Hindu Castes and Sects*, Editions Indian, Calcutta 1973 (reprint), p. 214.

<sup>67</sup> Hoey, *Monograph on Trade and Manufactures*, p. 92.

<sup>68</sup> P.V. Mehd, 'Tanning Industry, its Development in India' in *Proceedings of the Ninth Indian Industrial Conference at Karachi*, Amraoti, 1914.

<sup>69</sup> *Industrial Survey, Central Provinces*, p. 71.

<sup>70</sup> *Ibid.*, p. 71.

<sup>71</sup> *Industrial Survey, United Provinces, Cawnpore District*.

Eventually, and especially in regions with a plentiful supply of hides, tanning represented an attractive investment for just anyone who had some capital. During an export boom created by the First World War, factories mushroomed in Kanpur, Bombay, Calcutta and Madras. Such ventures normally suffered from high mortality, but they did transform the industry. The magnitude of the change is captured in the approximate percentages worked out by a 1952 report on hides marketing. Village tanners were estimated to process 43 per cent of the hides, whereas the factories processed 50 per cent (30 for exports, 20 for domestic leather producers). The remaining consisted of 'raw', that is, semi-cured hides for exports and hides entering other uses.<sup>72</sup>

These new avenues of mobility did not attract many Hindu trading castes, and were thus filled by the Muslim merchants, Europeans, Parsis, Chinese, and Eurasians, with the Muslims having closer access to the village. The rural hide trader was variously called the Sheikh, Khoja, Quassai (butchers) or the Kachchi. The tanning/scavenging castes were still the main collectors of hides, the agents of the rural trader. A report of the 1930s described the Khojas of Punjab as a class of merchants who, in leather trade, had 'sprung up recently.' They had a strong cartel. They processed the raw hides, got them tanned by the Chamars who were under contract both to procure and to tan.<sup>73</sup> There was also an implicit moneylending in these transactions. In the 1950s, the town merchant having his own curing yard in the village had probably become more common.<sup>74</sup>

Quite apart from conditions in the village, tanning became urbanised because the towns that developed as points of hide trade had strong locational advantages: raw material availability in Kanpur and Madras and the ports in Calcutta and Bombay. Kanpur, since its occupation in 1801, housed a cantonment. The local Chamars at that time were supplying the troops with the necessary articles, gradually adapting quality by observing the British products. When the mutiny demonstrated the need to have more centralised army supply bases close to areas of potential trouble, Kanpur was chosen as the site for a government harness and saddlery factory in 1867. The idea came from a young artillery officer Stewart who set up a tannery with English soldiers with experience in tanyards, the original hides coming from the 'commissariat cattle' (cattle serving the troop's, rather the English officers', need for meat). In the same decade, a north Indian managing agency started by Cooper Allen, shortly to become the source for the entire Indian army's boots and shoes and saddlery.<sup>75</sup> The

<sup>72</sup> Government of India, Ministry of Food and Agriculture, *Report on the Marketing of Hides in India*, Delhi, 1952, pp. 56-57.

<sup>73</sup> *Punjab Provincial Banking Enquiry Committee*, pp. 302-303.

<sup>74</sup> Government of India, *Report on Marketing of Hides*.

<sup>75</sup> 'The largest individual concern in the world which deals in leather from the raw state to the manufactured article,' *Hides Cess Enquiry*, Vol. II, evidence of the company, p. 6.

town was close to Agra, Aligarh, Delhi and Meerut, each of which had a meat trade and thus local slaughtering. Aligarh was known for the best buffaloes in India. The railways integrated Kanpur with Bihar, Punjab and the Central Provinces, the triangular tract which yielded India's best cattle hides, from 'Darbhanga' to 'Multani'. Forests were within easy reach.<sup>76</sup>

Similarly, the suburbs of Madras, which witnessed a spectacular growth of factories before and during the First World War, enjoyed proximity to one of the best vegetable tannin in India, the *avaram* bark. Large army tanneries existed in the early nineteenth century in Bangalore, Hoonsur and Madras. But tanning did not attract private enterprise on a large scale until the legendary efforts of a French Eurasian of Pondicherry, Charles de Susa, who discovered the best way of utilising the *avaram* bark. Till then, *avaram* bark tanning tended to produce skins which, on exposure to air, suffered a 'fawn red discolourisation which was previously one of the distinguishing features of country-tanned leathers.'<sup>77</sup> De Susa could avoid this effect by treating the leather in myrobalan bath, subsequent to tanning. From the 1840s, the time his factory at Pondicherry was at work, there began a tanning industry in Madras. *Avaram* was generally acknowledged to be superior to the north Indian tannin, but its best use was in skins and not in hides. The Madras industry, therefore, specialised in skins. An added factor in this choice might have been the relative advantages of regions in livestock; the south's lay in goats and sheep, animals more adaptable to drier and drought-prone regions than cattle which thrives on rich grasslands. As in the north, the railways connected Madras town with a wide area stretching from the Tamil countryside to southern Andhra and from the Deccan to Orissa, supplying skins. To these natural advantages were added the growth of Madras as city, and thus, as destination of migrant labour. The main body of manual workers, it would seem, was drawn from the agrarian labour castes, chiefly the Paraiyans. The white collar jobs, on the other hand, were sometimes performed by people who owned land. In such cases the interactions between the 'tannery men' and the 'factory men' reproduced, in a much milder way, the hierarchy in the villages that both had left behind.<sup>78</sup>

The advantages enjoyed by Calcutta and Bombay, on the other hand, did not consist in proximity to sources of raw material, but in the facility of trade. First of all, they were the premier ports, major points from where hides were sent out and, hence, with a plentiful supply of hides. The ports, and especially Calcutta and Bombay, were served by different railways

<sup>76</sup> A rough impression of the immense pull of Kanpur, and the centralisation of hide trade, over the vast northern plains can be had from the information on leather industry available in the district reports of *Industrial Survey, United Provinces*.

<sup>77</sup> Chatterton, *Monograph on Tanning*, p. 2.

<sup>78</sup> *Indian Industrial Commission, Evidence of G.A. Chambers of The Chrome Tanning Co., Pallavaram, Evidence (Madras Volume)*, p. 323.

and, thus, offered manufacturers and traders alike competitive freight rates and simpler procedures of quotation, advantages that were unavailable to a town in the interior.<sup>79</sup> As ports, and as towns, they attracted foreign trading firms. Thus, the growth in the hide trade through Calcutta till 1914 is associated with German enterprise in the city. These towns were also major destinations of migrant labour. The Chamar migration into Calcutta had probably begun earlier, but factories were slow to expand, and in 1914 the city had only six tanneries in the suburbs. None had any machinery to speak of, the Chamar foremen providing all the expert knowledge, with a combined output not exceeding 100 hides a day. In 1929, the city had 300 tanneries, tanning annually 1.9 million hides and skins and 1.4 million lizard skins. One major byproduct of this boom was the beginning of commercial chrome tanning. Although many of the War-time concerns failed, the method survived. The labour force in tanning was entirely made up of migrant Chamars from north India and the coastal south. They adapted very quickly to new processes, and though they visited their villages at harvest time, they were beginning to settle down in the city in the 1920s. Already in 1900, Bombay's 'neighbouring village Dharavi . . . is entirely given up to the tanning industry.' The tanneries were owned by the Bohra and Memon merchants, groups controlling Bombay's hide trade, though, interestingly, one tannery belonged to a Mochi. Shortly after the War, the city had 30 tanneries. The workforce consisted of Tamil-speaking caste tanners, who reportedly furnished better labour than the local tanners.<sup>80</sup>

A further advantage of the big cities as location, rarely stated but likely to have been strong, was water. Tanning on a large scale was especially intensive in water, but for obvious reasons, would not have had easy access to sources that were common property to the village. In other words, it needed a system of centralised supply such as a modern city could offer.

The number of large tanneries in India rose from 13 in 1901 to 66 in 1939, with a doubling of the labour force. The year 1919 represented a boom, whence the factory sector shrunk somewhat in 1939, partly due to bankruptcy in some War-time concerns and partly to enforcement of the Factories Act in 1934. Using 1921 census employment, factories employed 5 per cent of leather workers in UP, and 4 per cent of tanning workers in Madras. But this is obviously an underestimate since the 'factories' here refer only to concerns registered as such. A provincial survey of unregistered factories was carried out by the Royal Commission on Labour, 1931,<sup>81</sup>

<sup>79</sup> This point is empirically demonstrated by R.D. Tiwari, 'Leather Industry: Its Transport Problem', *Journal of the University of Bombay*, Vol. 6 (4), January 1938.

<sup>80</sup> Among the sources on the two cities, see especially, *Hides Cess Enquiry*, Vol. II, evidence of B.M. Das, superintendent of Bengal Tanning Institute, pp. 113-16, and evidence of Advani, p. 401; *Indian Industrial Commission*, evidence of B.M. Das, Bengal Volume, p. 82; Martin, *Tanning and Working in Leather, Bombay*, pp. 2, 30.

<sup>81</sup> His Majesty's Stationery Office, *Royal Commission on Labour in India*, London, 1931, Evidence, Vol. XI (Supplementary). Although the survey was claimed to be a census, for many provinces it does not appear to be so.

which showed that in Madras 776 tanneries employed close to 10,000 workers each, more than double the 4,000 employed in larger tanneries. According to the 1931 census, the total represents about 25 per cent of all leather workers in the province. The survey seems to be less complete for the other provinces, but the Bombay and Bengal surveys supply interesting descriptions of the new work organisations. While tanning was usually a male occupation,<sup>82</sup> in some factories of Bombay women and children were employed sorting wool. In Calcutta, a typical work organisation was not really the factory as such, but a collective of three or four Chamars hiring a shed, a few workers and some children above ten.<sup>83</sup> It was as if a Chamar colony in the village moved itself to the city to form one big tanners' village located on the suburbs of the city.

The tendency of the craft to concentrate, in larger units in the cities, was further strengthened by the need to intervene in technology. Exports highlighted the fact that the rural Chamar 'at present . . . turns a decent hide into an abominable leather.'<sup>84</sup> In fact, the hide was so poor as to make Indian exports driven by the residual foreign demand and thus highly unstable, 'If China's or other markets [Java, for example] are low, Indian stuffs do not find sale anywhere.'<sup>85</sup> The relatively poor quality was partly due to the size and health of the animal, the Chinese produced a much heavier hide than the Indian. But there was also bad and careless processing. Curing under the Indian sun so hardened and contracted the fibres of the skin that great effort was needed to loosen the pores again for the skin to absorb tan. Excessive use of lime damaged the fibres. The absence of any finishing produced an unattractive leather. Bad flaying left either too much flesh or too many cuts. The indelible brands on cattle destined for the consumption of the troops,<sup>86</sup> marks left by the yoke and in regions like Bombay, where the driving stick had a nail fixed at an end, the 'merciless' application of the goad disfigured the leather.

The universal response was to take as many processes as possible away from the rural Chamar to the tannery, leaving to him the barest curing essential. Thus, whereas the monographs about 1900 still describe country-finishing processes, including dyeing, by the time of the Hides Cess Enquiry, descriptions of technology make no reference to these. The proportion of

<sup>82</sup> Employment of females in tanning appears extremely rare. But there does exist one reference to women currying the tanned hide in the south, Report of the Madras Exhibition, 1855, cited in Chatterton, *Monograph on Tanning*, p. 2.

<sup>83</sup> *Royal Commission on Labour*, pp. 38, 62.

<sup>84</sup> *Industrial Survey, Central Provinces*, p. 66.

<sup>85</sup> *Hides Cess Enquiry*, Vol. II, evidence of Mohamad Latif, exporter of Kanpur, p. 37. The witness, however, had an interest in exaggerating instability and thus opposing an export cess.

<sup>86</sup> Branding, in fact, was an extensive and notorious practice. Other than on 'commissariat' cattle, branding was resorted to in certain sicknesses of the cattle, as a mark of ownership, and with a motive similar to poisoning, to impair the value of the hide and thus preempt claimants. See on the latter, *Indian Industrial Commission*, evidence of G.A. Chambers, Madras Volume, p. 321.

cured hides in total exports was falling in the long run in favour of tanned and dressed hides. Cured hides were merely the sun-dried *sukties* collected from the villages and exported, tanned hides came from the urban tanneries. Direct contracting between the slaughterhouse and the tannery eliminated not only the rural Chamar, but also one stage in curing. A second response was to switch from sun-dried to wet-salted curing, less accessible to the average rural tanner. A third form of adaptation was the Madras 'half-tan'. The half-tan was in fact a nearly finished leather but carrying a tan easily removable so that the leather could be retanned. Retannage possibilities made the product flexible as an intermediate, suitable for a variety of uses and increased its export demand. The half-tan industry was in a class of its own: it had a distinct market, its producers had different interests from the north Indian tanning lobby,<sup>77</sup> and its larger extent and more successful career seem to have induced not only greater advances in sorting and standardisation of material, but also greater local supply of hides and skins.<sup>78</sup> In 1945, Madras had 12 per cent of India's cattle, but 25 per cent of kips production (Table 3). Not only the slaughtering rate, also the proportion of fallen cattle, were higher than average. There being no reason to believe that animals had higher mortality in Madras, reporting and collection must have been better.

But if old problems found solutions, new ones arose, the most distressing being the butcher's cuts at the public slaughterhouses. Bad flaying meant

**Table 3**  
*Production of Kips\* in India, 1945*

	<i>Cattle population (m)</i>	<i>Fallen hides in population (%)</i>	<i>Slaughtered hides in population (%)</i>	<i>Total kips produced (m)</i>
Bombay	10.3	8.5	1.6	1.0
Madras	16.6	16.9	4.1	3.5
United Provinces	21.7	4.7	0.6	1.1
West Bengal	8.5	9.4	4.7	1.2
India	140.0	8.8	1.4	14.2

**Source:** Government of India, *Report on Marketing of Hides*.

**Notes:** A comparable figure of output for the mid-1920s comes from A.C. Inskip of Messrs Cooper Allen in his evidence before the Hides Cess Enquiry, 1929. Estimated cattle population: 180 million; assumed mortality: 10 per cent (a generally accepted figure); estimated hide output: 18 million. This is for undivided India, whereas the table refers to the present boundary of India. In 1927, exports at 8.7 million constituted 47 per cent of production.

\* Lightweight cattle hide.

<sup>77</sup> The Madras half-tanners favoured an export duty on hides, debated and introduced in 1929, whereas the Bombay and Karachi lobbies opposed it.

<sup>78</sup> *Hides Cess Enquiry*, Vol. I, Report, p. 29.

that the flayers cut the inner tissues of hides making the piece useless for the tanner. These cuts randomly crisscrossed on the inside of the finished leather.<sup>89</sup> A universal reason for the increase in flaying defects was the partial withdrawal of hereditary tanning castes from the process. Simultaneously, new people entered the craft. In the north, the peak season for slaughtering was the winter, when meat was dried for export to Burma. The slaughtering and flaying were done in the night until dawn, presumably because the day was spent in sorting and purchases of animals. The building being small, much of the peak season operations took place in the open. The master butcher had a 'following of young lads of the caste who are being initiated into the art of flaying.'<sup>90</sup> Already distressed by poor light and the chill, the inexperienced boys worked as fast as they could to turn a miserable piece-rate of 3–5 annas per animal into a respectable time wage. Added to these problems, were the minor local variations in manners of flaying, which made standardisation difficult.<sup>91</sup> Bad flaying, moreover, carried no punishment since the hides were sold on live animals.<sup>92</sup>

In the 1920s, a whole range of incentive systems were being tried in flaying. Although the Director of Industries often issued communiques in this regard, the effect was generally slight.<sup>93</sup> More noteworthy attempts are associated with larger individual concerns in Peshawar, Calcutta and Aligarh. The incentive was offered sometimes by the buyer of the hide, sometimes by the employer of flayers. In any case, if the problem was created by mass production, it was recognised that the solution had to be found in the framework of a factory. Going back to the rural supplier would not work, 'In the villages buyers would not pay bonus for good flaying',<sup>94</sup> for monitoring quality over a widely dispersed body of producers was impossible.

Despite improvements, Indian hides retained the image of poor quality. This combined with the world Depression to cause exports to remain low and stagnant throughout the 1930s. Surprisingly, however, there was no report of a crisis in tanning, 'for the local market has not let [the tanners] down'.<sup>95</sup> Even before the First World War, Chamars in the cotton tracts were known to have been engaged in unconventional products such as leather for ginning rollers.<sup>96</sup> During the war, when many essential industrial

<sup>89</sup> Cooper Allen, who presumably had better access to good quality hides than the smaller producers, stated, '75 per cent of the hides passing through our hands are damaged by bad flaying', *Hides Cess Enquiry*, Vol. II, evidence of Cooper Allen, p. 7.

<sup>90</sup> *Hides Cess Enquiry*, Vol. II, evidence of A.E. Corbett, exporter of Kanpur, p. 29.

<sup>91</sup> Guthrie, *Report on Leather Industries*, p. 3, refers to the hazardous and 'peculiar method of cutting' at the Bandra slaughterhouse.

<sup>92</sup> In Calcutta, butcher's cuts owed to the practice of extracting as much meat as the flayer could, *Hides Cess Enquiry*, Vol. II, evidence of B.M. Das, p. 96.

<sup>93</sup> *Indian Industrial Commission*, evidence of A. Carnegie, manufacturer, Cawnpore, Evidence (United Provinces Volume), p. 121.

<sup>94</sup> *Hides Cess Enquiry*, Vol. II, evidence of Latif, pp. 36–39.

<sup>95</sup> *Hides Cess Enquiry*, Vol. II, evidence of Pandit, p. 387.

<sup>96</sup> Guthrie, *Report on Leather Industries*, p. 1.

implements like belting and roller skins for the textile mills were in short supply, tanneries in Calcutta and Bombay were diversifying into leather.<sup>97</sup> The fact that chrome-tanned leather was especially suited to these uses was an inducement for the expansion in chrome tanning in Calcutta. If the initial impetus to diversify was import substitution, the diversification was also reflected in the rising share of finished leather in exports from the 1930s. But it was still restricted to a few larger tanneries in mill centres. Perhaps a more important inducement for the strengthening of domestic demand for hides arose from a change in the craft the Mochi performed.

### Effects on Leather Manufactures

Trade constrained the rural leather worker, on the demand side, by creating a taste for better-finished shoes and, on supply, by a shortage of hides. To this was added a long inflation in hide prices. By the first decade of the present century, the Kanpur tanneries had 'no leather to spare for the bazar', causing a 'great contraction in the supply of hides and skins for the local industry.'<sup>98</sup> In most places near a big hide market for exports, the Mochis had to be satisfied with 'triple rejections.'<sup>99</sup> In Bombay, likewise, the leather artisans found themselves eliminated from customary access to hides once the tannery agents began contracting directly with the Mahars.<sup>100</sup> If the global trade in leather was growing, most producing countries had stiff tariff barriers to finished goods, closing the prospect of exports.

About 1900, 'prosperous natives' of Bombay had more or less given up the locally made shoes, and adopted those of Western fashion. In 1910, in Bombay city, 'some considerable time' spent in observing the footwear of those who wore any at all revealed that nearly one-third sported European shoes.<sup>101</sup> In Bengal at the same time, foreign shoes were sold in all bazaars and fairs, whereas 'fifty years back they were to be found only in the largest towns.' In the Central Provinces, foreign shoes had replaced local footwear in the towns and among 'the richer classes of villagers.' Interestingly, foreign shoes were uniformly more expensive or without any noticeable price advantage. The reason for their popularity lay to some extent in the quality of the leather. It also derived from their better shape and the greater range of sizes. The country craftsman was notorious for his disregard

<sup>97</sup> For a brief description of the early history of a firm manufacturing (substituting imports in the process) pickers, a leather shock-absorber in the picking motion of a loom, see I.M. Mansuri, 'Picker Industry in India', in *Symposium on Tanning*; another source on the western Indian picker industry is *Bombay Leather Survey*, Appendix F, pp. 153-55.

<sup>98</sup> Chatterjee, *Notes on Industries*, pp. 99-101.

<sup>99</sup> *Indian Fiscal Commission*, evidence of L.C. Mousell of Calcutta Hides and Skins Exporters' Association, p. 350.

<sup>100</sup> Guthrie, *Report on Leather Industries*, p. 19.

<sup>101</sup> *Ibid.*, p. 3.



for anatomy, forcing his clientele to be, as a rule, 'content with anything that approximately fits them.'<sup>102</sup> More subtly but universally, foreign shoes served as a status symbol: 'the loud creaking . . . is a great attraction, as it advertises to all and sundry on the owner's possession of up-to-date footwear.'<sup>103</sup> By the 1920s, the typical country shoe, reddish with a curled front, was beginning to become obscure, and with it a whole catalogue of products was on the way to a quiet exit. The *shiroli* or Poona Brahman shoes, the *marhatti* or the two-toed Ahmednagar shoes, the standard slippers or *chaplî* of the entire north and north-west and *hafti* of the west, the Parsis' *Surati jora*, the Goa *sapat*, Konkani Muslims' *zenani juta*, the Memons' half-shoes, the *bandhai*, *astaria*, *alga* of central India, the *salimshahi*, *punjabi*, *golpanja*, *zerpai* of the north, each serving a specific caste and regional clientele were no longer products worth remarking in connection with the cobbler's art.<sup>104</sup>

What is remarkable is the ease with which the cobbler seemed to reorient his skills. In 1908, Chatterjee noted in UP a great demand for country-made 'European' shoes or the *bût*, 'the supply [of which] is not equal to the demand.' In the towns, the manufacture of ornamental shoes was similarly replaced by boots and shoes of standard shapes, harnesses, bags and portmanteaux.<sup>105</sup> This was surely 'a profitable trade', as any contemporary account of the Mochis as a caste suggests.<sup>106</sup> Ewbank observed in 1918 that 'the boot-making classes seem to be doing very well,' and the 1921 census attributed a decadal rise in the proportion of Mochis following their traditional occupation to the prospect of diversification.<sup>107</sup>

If tanning became urbanised, leather tended to as well, the standardisation of product reinforcing the tendency. In 1903, Martin saw settlements of recently migrated Mochis around Bombay town. They settled in Dharavi in workshops employing four to six workers on piece-rates. Whether due to collective work or to better quality leather or proximity to a market that better reflected tastes, they produced 'a larger variety of products and a better class of workmanship.' They came from as far as Bengal, the

<sup>102</sup> Chatterton, *Monograph on Tanning*, p. 37.

<sup>103</sup> On change of tastes in western India, see Martin, *Tanning and Working in Leather, Bombay*, p. 9; on change of tastes in Bengal, see Rowland N.L. Chandra, *Tanning and Working in Leather in the Province of Bengal*, Calcutta, 1903, p. 3; the quotation is from *Industrial Survey, Central Provinces*, p. 59.

<sup>104</sup> For a description of a range of indigenous north Indian footwear, and of the *jutafarosh* who made and retailed them, see Hoey, *Monograph on Trade and Manufactures*, pp. 124-26. An important instance of survival must be mentioned, the *kolhapuri*, which proved very well adaptable to the times, apparently due to the superior bag-tanning process for the sole practised by the Dhors in Kolhapur, Satara and Poona, and to that balanced mix of utility and lightness of design which ensured a future for many other artisan goods.

<sup>105</sup> Chatterjee, *Notes on Industries*, p. 105.

<sup>106</sup> Blunt, *The Caste System*, p. 237.

<sup>107</sup> *Indian Industrial Commission*, evidence of Ewbank, Bombay Volume, p. 546.

Bengalis in particular supplied the 'cleverest workmen.' In 1916, Ibbetson stated that 'in the east of the Punjab the name [Mochi] usually applied only to the more skilled workmen of the towns.' A decade earlier, Chatterjee had found leather footwear to be a prominent industry in Meerut, Agra, Lucknow, Kanpur, Allahabad and Benares, owned by Mochis who had migrated recently. Only in Agra were there footwear factories. But Chatterjee also came across 'a growing class of Musalmans as well as Hindus in the province who would be willing to embark on the enterprise.' Agra, 20 years later, was probably India's largest and the most concentrated centre of leather manufacture. In 1923–24 this industry employed, in Agra town alone, 25,000 persons, 'small capitalists belonging to the middle classes take to it more kindly than to leather-making.' In Allahabad in 1930, shoemaking took place in Mochi-owned karkhanas, which employed Mochi workers, and some at least used power-driven machinery, innovative designs and styles, to popularise which 'the municipal leather school is doing a lot.'<sup>108</sup> In 1903 in Bengal, 'wherever there are skilled shoemakers, foreign [sic] leather from Calcutta or Cawnpore, is exclusively used.'<sup>109</sup> In 1924, a cottage industry survey found Mochis tending to settle in the suburbs of Calcutta, Dacca and the smaller towns. Many were migrants from the 'up-country', and workers in small factories. As in tanning, the actual artisans often belonged to the traditional castes, whereas the white collar tasks offered excellent prospects for the educated unemployed of the cities. In Madras, likewise, the small and scattered collectives of Mochis usually consisted of immigrants from Bombay. Significantly, and bearing a parallel with tanning, the immigrant Mochis enjoyed, or asserted, a higher social standing than they would command in the lands they came from.<sup>110</sup>

The combination of factories, Mochi craftsmen, and middle class capital is the story of many smaller towns as well in different parts of India, though

<sup>108</sup> Shanti Prasad Shukla, 'A Survey of Small Urban Industries of Allahabad City', Government of United Provinces, *United Provinces Provincial Banking Enquiry Committee*, Vol. 2, Evidence, Allahabad, 1930, p. 420.

<sup>109</sup> On Bombay, see Martin, *Tanning and Working in Leather, Bombay*, pp. 2, 9, 26; on Punjab, Ibbetson, *Punjab Castes*, p. 300; on United Provinces, Chatterjee, *Notes on Industries*, pp. 98, 105; on Agra, United Provinces, *Report of the Industries Reorganisation Committee*, Allahabad, 1934, p. 21; and on Bengal, see Chandra, *Tanning and Working in Leather, Bengal*, p. 2.

<sup>110</sup> The Mochis of Madras wore the thread, 'pretensions' that would not be 'admitted on the Bombay side', Chatterton, *Monograph on Tanning*, p. 13. This reference touches on a fairly universal tendency in artisan history. It would appear that the local societies tended to be more ambiguous about the relative status of the highly skilled commodity-producing craftsmen, than they were about the position of the priestly, propertied or the labouring groups. Artisans, in other words, could realistically try to alter their station by settling in newer territories where their skill was highly valued but their background was unknown. Hence we find an almost universal tendency for skilled craftsmen to migrate or, more precisely, to consider themselves aliens wherever they lived and worked. Usually, this image was associated with social practices and claims invariably disputed by some of the local elite.

not rarely the workshop belonged to the Mochi himself. In Punjab, Badenoch found Mochi enterprise in Karnal supplying government stores, and noted with satisfaction that 'the mochi is quick to learn.'<sup>111</sup> In western India, as Sholapur and Satara, which had a previous history in bag tanning, became points of hide trade, leather workshops sprang up. In Poona and Ahmednagar, both craft and business towns, many leather footwear *karkhanas* were reported in 1936, owned by 'rich Chamhar and Bohara merchants.' Each employed about five to ten *pardeshi* (foreign) cobblers, using machinery and 'possessing a very high skill in their profession.' Immigrant cobblers could be seen settled in colonies at the outskirts of several towns. In general, the organisation of trade and industry seemed to resemble that in any craft, 'with its eternal triangle formed by the karkhanadar, the independent worker and the dependent worker.' An 'independent' worker was one who sold in a market, and not necessarily on contract; he had to absorb the price fluctuations which could occasionally prove unbearable. A dependent worker, on the other hand, was on a putting-out contract.<sup>112</sup>

But like tanning, caste participation in large-scale production of leather remained rare. At the same time, entrepreneurship was probably more diverse here, in tanning as well as leather, than in most other industries. Presumably, the Hindu trading castes' avoidance of the craft had also reduced guild-like barriers to entry for others. In Madras, the early enterprise in tanning was entirely in the hands of the Eurasians, though 'their lack of energy, improvidence and inferior business capacity enabled Muhammadans and native tanners to cut them out.'<sup>113</sup> Some of the oldest of the Madras tanneries surviving in the mid-twentieth century (the Parpia family concerns, for example) were set up by Muslim merchants who migrated from Kuchch in the 1860s. In tanning in Kanpur, European and Eurasian capital was strongly involved.<sup>114</sup> But cooperation with Muslim traders was a support the European ventures could not do without, leaving

<sup>111</sup> A.C. Badenoch, *Punjab Industries, 1911-12, Lahore, 1917*, p. 22; Government of Bombay, *Report of the Bombay Economic and Industrial Survey Committee*, Bombay, 1938, p. 68.

<sup>112</sup> Y.S. Pandit, *Economic Conditions in Maharashtra and Karnatak*, Poona, 1936, pp. 125-27.

<sup>113</sup> Chatterton, *Monograph on Tanning*, p. 2.

<sup>114</sup> We have already referred to the two integrated government factories at Kanpur. One of the best-known and early private tanneries in the city was set up by A.H. Creet, an Armenian born in Persia. Creet migrated to India in 1874, and was first a jeweller in Lucknow, then a dealer in leather c. 1880-81, and finally proprietor of the Cawnpore Tannery in 1896. A decade later, the factory was sold to a partnership between one William Stork, Hafiz Abdul Kazi and Hafiz Mohammad Halim, the last probably the leading hide merchant of Delhi and Kanpur. During the War, the firm did very well simultaneously executing orders for meat to the troops and hides to the Ordnance Department. These and similar information on firms in Kanpur are taken from an undated, untitled (missing title page) and partially catalogued industrial directory preserved at the Centre for Development Studies (Trivandrum) library. The approximate date of the directory seems to be the early 1920s.

open an avenue of mobility to the former. Some of the most successful Muslim tanners in Kanpur, the firms of H.M. Halim, of Abdul Gafoor or of M.A. Wasay and H. Nabi Baksh, accumulated capital through agency of the European tanneries, or as agents of the many German trading firms prominent in the trade through Calcutta. The partial eclipse of the German cartel during the First World War was the chance they needed to move from trade and procurement to manufacture.<sup>115</sup> In Bombay in the late nineteenth century, the Bohras and Memons, the Muslim trading castes owned tanneries. In Bengal, the largest and the best-known tannery was a Bengali 'swadeshi' venture, but the War boom was led largely by Chinese tanners. By the end of the 1920s, the shoe manufacture and trade of the city diversified further from the Chinese-held Bentinck Street market, towards the northern suburbs. Here, Punjabi Muslims owned workshops, and north Indian Mochis worked in them. They not only displaced imported shoes completely, but were known to be so skilful that 'their services are requisitioned even by the reputed European firms.'<sup>116</sup> Thus began a network of subcontracting relationships to which the city's privileged situation in leather trade owed a great deal. By the end of our period, however, both tanning and leather factories involved fairly significant Hindu capital. This seemed to have flown in via several routes, such as money accumulated in the export trade, white collar employees of large tanneries and leather factories or leather goods trade. There was at least one notable instance in Madras of a Chettiar moving from banking to leather via the export trade.<sup>117</sup>

### Concluding Remarks

The integration of colonial India into a world market created an export boom for Indian hides and skins that began in the 1870s and continued for nearly half a century. Earlier, the craft was performed largely as a service wherein the rural labourer customarily received hides free and supplied finished goods to neighbours. The export trade created a large demand for hides outside the village, and in the process created a market for the craftsman's labour, enabling him to leave the customary labour services

<sup>115</sup> Abdul Gafoor of Allahabad, who established himself in Kanpur hide trade in the early 1880s, was a procurer for the German firm Schroeder Smidt. The association continued off and on till 1914 when the war drove out the German firm, and Gafoor with his sons set up a tannery. Wasay and Nabi Buksh were hide merchants of Kanpur, and agents of Wuttow Guttman, and later of Cohen and Fuchs. By 1914-16, these collaborations were in trouble. In 1916, they finally broke down and Wasay and Nabi Buksh amalgamated with another trading firm, Mohammad Ismail, to set up the UP Tanneries on Jajmau Road, the tanning hub in the city. Creet's firm, known as Stork, Halim & Co. from 1904 finally came in the possession of Halim in 1907. For source, see note 114.

<sup>116</sup> Government of Bengal, *Report on the Survey of Cottage Industries in Bengal*, Calcutta, 1929, p. 40.

<sup>117</sup> *Indian Leather Trades and Industries Year-book*, Madras, 1967

imposed by the village. These developments encouraged urbanisation of the industry and relocation of tanning into urban factories. Yet another effect of export trade was felt in technologies, as quality control became imperative, encouraging interventions by traders and mass production. Leather goods imported, on the other hand, altered tastes and standardised products sold in the home market. But since competition between the leather artisans' output and imported wares was less on cost and more on quality, imports could be substituted under stricter control on work processes, an adaptation that again pulled the country craftsmen closer to the trading points and turned him into an employer of labour or a labourer himself.

Going beyond leather, these findings contribute towards a more generalised history of the crafts in colonial India, a task that involves comparing the experiences of different industries. With much more work on textiles available now than even a decade ago, this should be easier. There are differences in the way the two industries changed due to exposure to trade, but it would still be instructive to know where their experiences converged.

The differences are obvious. Textiles confronted a wide technological gap between India and England. The effect of trade was disruptive on the weavers, partially destroying the craft. Leather faced no such threat. But the experience of cloths which did not face competition from powerlooms had elements similar to leather. This consisted in the creation of larger markets from local and rural ones, attributable in both cases to development in transportation, in response to which weaving tended to relocate itself near points of internal trade and tanning near points of export trade. Both crafts, moreover, faced similar problems in technology: slow and uneven pace of work and absence of quality control. Towns once again offered a better atmosphere for experimentation, being locations where many producers congregated and many practices coexisted and where information about markets and technologies were easier to obtain.

In both textiles and leather, factories or putting-out were among the new and increasingly popular systems of work. This required a labour force on hire. In both crafts, hired labour was available, but the preconditions somewhat differed. In cloth, competition from powerlooms reduced many craftsmen from sellers of commodities to sellers of labour. In leather, the rural tanners were never in possession of the output of their labour. But the degraded status that this was due to, itself created a motivation to leave the village and specialise.

The consequences of new institutions, however, were different in one respect. The new mercantile and capitalist classes were drawn largely from within weaver castes in the case of textiles, but in leather they came from trading and professional classes with a strong non-Hindu presence. Why was entrepreneurship relatively weak among leather producers? This difference could be explained by the status of the craftsmen or by reference to the technology. It is arguable that commodity-producing castes had better

prospects of mobility than service castes, for the latter were excluded from business networks and were generally expected to perform labour. It is also noteworthy that tanning was a far less skill-intensive craft than weaving. Tanning needed a native familiarity with plants and roots, but textiles needed imagination and dexterity and resulted in a diversified output. Textiles, in other words, was a high-value-added craft and offered returns to skill.

Finally, both textiles and leather illustrate a point in the historiography of colonial India. That the extension of market exchange must be at the core of interpretations of economic change in nineteenth century India is well-acknowledged in agrarian history, which has described commercialisation, looked for the growth-inducing consequences of markets, explained their absence where these effects failed to appear and explored the interactions between markets and the social-cultural-ecological contexts in which they emerge. Curiously, this line of enquiry has remained largely undeveloped in artisan history, presumably reflecting a belief that the world market, via changing tastes or technologies, tended to drive most artisans into obsolescence. On the contrary, with the exception of certain kinds of textiles, most of the major pre-existing industries faced integrated, sometimes larger, markets and little direct competition from machinery. The consequences were diverse, mediated as they were by differences in initial conditions and in the nature of the new demand itself. The present study, as well as the recent advances in textile history, have been in a general way stimulated by the need to understand how artisans addressed commercialisation.<sup>118</sup> The case study we have just concluded demonstrated an export-induced industrialisation that involved the artisans, creation of labour markets where none existed, accumulation of skills and capital and, in the process, the deepening of a comparative advantage.

<sup>118</sup> See also T. Roy, 'Home Market and the Artisans in Colonial India: A Study of Brass-ware', *MAS*, forthcoming.