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# UNIT 35 CRAFTS INDUSTRIES AND SMALL SCALE PRODUCTION

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## 35.1 INTRODUCTION

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Standard histories of industrialization and industrial labour in colonial India deal mainly with a type of firms described as ‘modern industry’ or ‘large-scale industry’. Large-scale industry, however, accounted for a rather small percentage of employment and income in the early-twentieth century. It has also had a shorter and a more recent history than small-scale industry. Until recently, small-scale industry has had at best a shadowy presence in Indian historiography. Recently it has emerged as a somewhat established field of research. This Unit summarizes some of the main themes in this emerging field. It begins with a look at definitions and the main trends in the small-scale industry. It also covers the debates on ‘de-industrialization’ in the early nineteenth century and the role of small-scale industry in industrialization.

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## 35.2 SMALL-SCALE INDUSTRIES AND LARGE-SCALE INDUSTRIES: SIMILARITIES AND CONTRASTS

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Large-scale industry can be defined by three basic characteristics, use of machinery and steam-powered technology, large factories, and some form of government regulation, most important of which was the Factory Act. The vast majority of industrial firms in India in the past or the present times, however, did not use machinery, were located inside households or small workshops rather than large

factories, and were not subject to government regulation. We call this sector ‘small-scale industry’. Handicrafts formed a significant subset of small-scale industry. One more feature, in addition to the three mentioned above, defined ‘handicrafts’ in particular. These industries dated from before colonialism. Keeping this feature in mind, handicrafts have sometimes been called ‘traditional industry’. Important examples of traditional industry or handicrafts are handloom weaving, leather manufacture, a variety of industries using metals, wood, and minerals, etc. In contrast to traditional industry, all of large-scale industry was of recent vintage, it was a product of the Industrial Revolution and India’s close political and economic contact with Britain.

Apart from technology, organization, regulation and vintage, there were a few other points of contrast and similarities between large-scale and small-scale industries. Large-scale industry in India was concentrated in two provinces, Bombay and Bengal. By contrast, about 1950, nearly half the employment in small-scale industry was located in the United Provinces, Punjab and Madras. Thus, large-scale industry and small-scale industry involved different regions. And likewise, the industrial histories of different regions in India involve different types of enterprise.

There was less of a contrast in composition. By far the most important industry among both sets was textiles. One in every four workers overall was employed in textiles. Next in importance were food processing, metals, wood products and hides and skins. We can conclude from this pattern that industries, intensive either in natural resources (cotton, metals, minerals, animal substances) or labour, dominated the composition of both. The relatively high resource-and labour-intensity characterized small-scale and large-scale industries.

The small-scale and large-scale, modern and traditional, had close relationships. Large-scale industry supplied raw materials to small-scale. Workers often moved between them. And small-scale industry workers and entrepreneurs sometimes learnt their skills and acquired new ideas by working in large-scale industry. The former could even buy secondhand machinery from the latter. Textiles supply examples of all three.

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### **35.3 GENERAL TENDENCIES IN SMALL-SCALE INDUSTRY**

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We need to now look at the different phases of the history of small-scale production, and account for the changes that occurred within them.

#### **35.3.1 The Seventeenth and Eighteenth Century**

Modern industry began in India from about the 1850s in some sense as an extension of industrialization in Britain. India, however, was a world leader in handicrafts and small-scale industry such as hand-loomed textiles in the pre-colonial period. At 1750, India supplied about a quarter of the world’s industrial output, and possibly a larger percentage of world textile exports. India was, thus, important in world trade. But it is not clear that world trade was so important to the textile economy within India. At the end of the eighteenth century, cloth export from India amounted to about 50 million yards (Twomey, 1983), whereas total production within India could not have been smaller than 1800-2000 million yards. We know a great deal about European trade, however, thanks to the trade archives in Europe. In fact, having to rely almost wholly on this resource, we know far more about the world that traded abroad than about the world that traded locally and over land, more about trade than production and producers, and about textiles than other industries.

The major exporting regions in India were Punjab, Gujarat, the Coromandel coast, and Bengal. These regions had or could get raw cotton, water, and labour. Before European traders entrenched themselves in Indian waters, each of these regions accessed particular trading networks, Central Asia in the case of Punjab, Red Sea and Persian Gulf with Gujarat, Southeast Asia with Coromandel, and Bengal used its waterways to trade with upper India. For a long time after the entry of the Europeans, the intra-Asian networks remained in place. Europe was not the leading market, nor were Europeans the paramount power until the eighteenth century.

By and large, the weaver worked from within a household unit, the women and children of which supplied auxiliary services including spinning in some cases. There were some exceptions to the family firm in the towns of the northern Gangetic plains, in the form of large workshops owned by rich men. Workers within these typically consisted of all-male master-apprentice teams, perhaps more than one team under a roof. We encounter these two general types - household and male master-apprentice teams - for a long time afterward. But both tended to dissolve into various mutant types of wage-labour-based workshops in the late twentieth century.

With the consolidation of Europeans in the Indian Ocean trade, there came about a long-term process of change. Contractual ties between the trader and the producer progressively strengthened in place of spot transactions, and a bigger number and greater variety of intermediaries began to be involved. The dispersed location of production, and increasingly concentrated markets involved rather high information costs. The need to enforce quality and standardization, and the need to ensure timely supplies, were forever problems the European traders grappled with. No easy or permanent solution was found, leaving enough room for breach of agreement, fraud, default, and in turn, coercion. European trade in Indian textiles had, thus, an essentially chaotic character.

### **35.3.2 The Early Nineteenth Century: De-industrialization?**

By 1800, the Europe-bound export trade network was dwindling. A fairly large demand for Indian handicrafts on behalf of the older nobility and elite whom the British increasingly suppressed, also declined. The first few decades of British revenue policy in the ryotwari areas is often believed to have caused a general demand depression in the rural areas. And from 1820, English machine-made yarn and cloth began to reach Indian markets. As a result, cloth and yarn prices probably fell by a factor of three or four in the next 75 years or so. All of these may have combined to deal a blow to Indian handicraft textiles in the early nineteenth century. This phenomenon is known as 'de-industrialization' and is believed to have pushed many industrial workers into other low-paying occupations.

The existence of an industrial decline in the nineteenth century is not in question. But the impact, timing, and significance of 'de-industrialization' in the early nineteenth century, are open to question. There is no direct evidence on how large the impact was. Nor is there any conclusive evidence on the time-table of a likely industrial decline in India. And while all scholars would agree on a large loss in employment in the handicraft textile sector, the scale of the corresponding loss in income and general welfare is disputed.

The statistical foundation of de-industrialization in the early nineteenth century is based on estimates (Bagchi, 1978; Twomey, 1983) suggesting a fall in industrial employment in the nineteenth century. Before English imports, an estimated 4-5 million persons were engaged in hand-spinning industry. Employment loss by the

end of the nineteenth century was at least as large as this. These estimates, however, do not pinpoint the decline to the early-nineteenth century. On the other hand, regional textile histories covering this period suggest that the decline in hand-spinning and hand-weaving was far more gradual and evenly spread out over time (see essays by Konrad Specker on south India and Sumit Guha on central India reproduced in Roy, 1996, and Harnetty, 1991). Increasingly, from the third quarter of the century, positive forces on the demand for handicraft textiles were strengthening, as we shall see. The decline, therefore, may not have come as a sudden violent cataclysm, but happened gradually and increasingly offset by positive forces.

As for income loss, hand-spinners were by and large domestic workers or agrarian labour castes who performed spinning on the side. The low opportunity cost of their labour implied that they were willing to perform spinning for very small payment. The income loss, therefore, was necessarily much smaller in magnitude than the employment loss. Further, Morris (1969) pointed out that a massive cheapening of cloth due to English imports must have caused an expansion in demand for textiles overall (including demand for those handloom cloths that remained in business). And the effect of a cheapening of yarn must have been a net gain for the handloom weavers who remained in business.

To summarize, there is no question that a large number of jobs were lost in the handicraft textiles in the nineteenth century. But we cannot be sure when and in how concentrated a manner this happened. Nor can we assert if there was a large income loss as a result within textiles. And from welfare point of view, these changes were more likely to have been a net gain than a net loss.

### **35.3.3 The Late-Nineteenth Century: Re-industrialization?**

Implicit above was two points that we now need to tackle. First, while a part of the handicraft textiles disappeared in the nineteenth century, a part survived. How did this survival happen, given that the technological gap between hand-tools and machinery continued to be wide and become wider progressively? Second, from the late nineteenth century, some positive forces began to work in favour of the handicrafts. What were these forces?

By every direct or indirect index that we can use, the period 1870-1914 saw net expansion rather than contraction in handloom weaving. The long-term survival of the handloom can be easily explained by relative advantages of power-loom and handloom. In the mid-nineteenth century, two types of hand-woven cloth faced keen competition from foreign or Indian mill-made cloth: 'coarse-medium' cotton cloth, and printed and bleached cotton cloth. In these classes machine production and mass production were distinctly superior. By contrast, cloths that used very coarse or very fine cotton yarn, or complex designs woven on the loom, or non-cotton yarn, tended to use the handloom. These were either so labour-intensive that the mills did not enter them by choice, or used non-cotton fibres that the mills did not want to handle.

The handlooms did not merely survive, but expanded in the twentieth century. How did this come about? The factors sustaining this growth, on the demand side, were threefold. There was, first, an expansion in average cloth consumption as a result of fall in cloth prices. Secondly, agricultural growth and commercialization strengthened local demand for traditional textiles and strengthened market networks in several regions (for an example, see, Haynes, 1998). Third, tariff protection to the textile industry from the mid-1920s helped the handloom industry. On the supply side,

there was increasing diffusion of labour-saving tools adaptable to small-scale workshop and household production, and changing industrial organization from households to wage-labour-using workshops (Roy, 2002).

### 35.3.4 Pattern of Growth in Small-Scale Industry: 1900-51

#### Employment

Large-scale industry was, and remains, a relatively small segment in employment. At 1900, it accounted for 5 per cent of industrial employment. In 1991, it accounted for 29 per cent of industrial employment. The overwhelming majority of Indian industrial workers functioned, and continues to function, in small-scale industry. Today, the share of large-scale industry in real income from industry is about half. The share increased from 15 per cent in 1900 to about 40 per cent in 1947.

The British period censuses tell us that industrial employment declined steadily and sharply, between 1881 and 1931. It declined from about 20 million to 13-15 million, while at the same time, employment in agriculture increased from 71 to 100 million. The percentage of workers in agriculture increased from 62 to 71, and that in industry it declined from 18 to 9. The decline in industrial employment was concentrated in small-scale industry. Some scholars, such as Patel (1952), read these percentages to mean that de-industrialization continued in the late nineteenth century. Further work by Daniel Thorner and J. Krishnamurty (see Roy, 2002, Chapter 9 for discussion) has shown that these shifts in occupational structure were probably spurious and arose from census definitions. In their reconstruction, occupational structure hardly changed between 1881 and 1951.

However, the Thorner-Krishnamurty critique is not very satisfactory either. It rests, among others, on the argument that the data on women's employment is questionable and should be excluded from analysis. Women's participation in industry declined dramatically in the census period. If women's data are excluded, occupational structure shows rather little change. If women's data are included, the share of industry in work-force shows a fall. Patel included women, Thorner-Krishnamurty exclude women. The argument for exclusion, however, is rather conjectural and not acceptable.

Are we then driven to Patel's perspective that de-industrialization continued in the late nineteenth century? The answer is, we are not. There can be another explanation why employment growth was small or negative. That is, change in industrial organization. Employment in small-scale industry fell before independence, and grew at a very small rate after independence. Post-independence census data show that the low rate of growth in employment does not mean an overall stagnation, but a shift from households or family-labour-intensive firms to small workshops or wage-labour-based firms. In other words, it implies a shift from less specialized labour to firms that use more productive and more specialized labour. Most household workers work in industry only part-time. Clearly, such a shift can reduce total employment, and yet raise the productivity of labour, which is what happened throughout the twentieth century. Such a shift is consistent with income trends as well.

Such a shift also explains why women tended to exit manufacturing work more often. Women worked mainly in family firms, and family firms were generally in decline. Patel's statistics may well be believable, but it has a different explanation, one that gives supply-side changes more importance.



National income data suggest that total and per worker real income in industry grew at significant rates (in the range 1.5-2 per cent per year) between 1901 and 1947. In fact, income per worker probably increased at a faster rate in small-scale industry than in large-scale industry (Sivasubramanian, 2001). Evidence of productivity increase is strong also in specific industries like handloom textiles, tanning, and metal work. In textiles, real value-added unquestionably increased, and in all of them, output indicators show growth whereas employment indicators show stagnation or fall (Roy, 1999).

Any general account of the handicraft industries in the twentieth century needs, therefore, to explain two things:

- 1) Low or negative growth rate in employment
- 2) Increase in productivity.

A story of uniform unqualified decline is consistent with the first, but not the second of these facts. A different story is possible, one that places more accent on commercialization of product and labour markets within the handicrafts.

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## **35.4 A NEW PERSPECTIVE ON INDUSTRIALIZATION**

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Let us look at the emerging trends of industrialization.

### **35.4.1 Commercialization, Competition, and Institutional Change**

Our discussion relates to a period of rapid commercialization in India. Long-distance trade expanded and regional markets integrated due to three factors: foreign trade, modern transport and communication, and security of private property rights. Small-scale industry was also transformed by commercialization. Production for subsistence, production under various types of non-market and barter distribution arrangements, and production for local, rural, periodic and other spot markets declined in favour of production on contract for distant markets. New marketing systems arose. These were located in big cities or at key railway points. This rise in long-distance trade had two types of effects: increased competition, changes in industrial organization, and changes in technology.

- 1) Commercialization increased competition within small-scale industry. In textiles, leather, metal-work, etc, we see numerous cases of small remote manufacturing traditions decaying from the late-19th century because either they were not known for good quality products or were located too far from marketing and transportation networks. At the same time a few large agglomerations emerged, these became concentrations of production, trade, capital, and labour. Artisans migrated in increasing numbers. These migrations created or extended markets in labour and capital, and encouraged the hiring of labour.
- 2) Industrial organization changed for two reasons. Commercialization made information and working capital essential resources. These being scarce resources, those in command of these resources increased power and could take closer control of the manufacturing process. Capitalists and labourers became more clearly distinguishable. So did employer-employee relationships. Second, competition among manufacturers led to increased specialization and division of labour.

### 35.4.2 A New View: Labour-Intensive Industrialization

All this entails a different way of looking at Indian industrialization in the colonial period.

The term ‘de-industrialization’ is sometimes used to illustrate the thesis that while Europe and North America experienced industrialization, the third world experienced some kind of an inverse of ‘industrialization’ (articulated in Bagchi, 1978, for example). Industrialization in this case tends to be defined as substitution of labour-intensive by capital-intensive products. Such a process is seen to have occurred in the north, but was impeded in the south. The idea that the third world saw an antithesis of industrialization found its most famous expression in a scholarship on the origins of underdevelopment, a process not restricted to early-nineteenth century India, but fairly general in time and space.

Based on a reading of the early-twentieth century evidence, some recent works in Indian industrial history call into question this usage of ‘de-industrialization’ as the distorted mirror image of ‘industrialization’ (Roy, 1999). These works suggest that a certain kind of industrialization took shape in India from at least the mid-nineteenth century, which relied on (and continues to rely on) cheap skilled labour, natural resources, a particular consumption regime that preferred traditional goods, and an internal market-induced drive to achieve greater efficiency in production. This ‘industrialization’ did not happen by getting rid of artisans like the hand-weaver. Rather artisans were a part of it and made a positive contribution in it by raising income per worker, as we have seen.

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## 35.5 TWO MAJOR INDUSTRIES

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From a discussion of overall patterns of change, we will now move to a consideration of two specific industries.

### 35.5.1 Cotton and Silk Weaving

#### Scale

In the interwar period (1919-1939), possibly 3 to 3.5 million persons were engaged in the cotton, silk and wool spinning-weaving industry. The mills employed about 10 per cent of this total, the rest used mainly hand-tools and were organized in households or very small factories.

From the late-19th century, it is possible to estimate the scale of production of handloom cotton cloth based on quantities of mill made and imported yarn that was left over after use by the mills. Handlooms accounted for about 25 per cent of the cotton cloth produced annually in the first half of the 20th century. Market-share of handloom cotton cloth was roughly stable between the 1890s and the 1930s. The total production of cotton cloth expanded by about 30 per cent between 1900 and 1939. Throughout this period, total cloth consumption was growing marginally, and Indian cloth was steadily substituting imported cloth. In cloths made of silk and other fibres, handlooms dominated. Taking all fibres together except wool, in the 1930s handlooms’ market-share in total cloth consumption in value may have been about 50 per cent.

The number of handlooms was roughly stable in the first half of the 20th century at around 2 million. Rising production and constant loomage suggest that the productivity

and the capacity of the looms increased. This can be independently confirmed. Estimates of real wages and earnings in handloom weaving suggest great variation between more skilled and less skilled weavers. But there was no sign of a sustained downward trend. National income data, in fact, suggest a slow increase in wages.

### **Conditions of Demand**

At least parts of the cotton textile industry were highly commercialized even before British rule. These segments supplied mainly foreign trade. From the first quarter of the 19th century, this foreign trade declined, and British cloth began to compete with Indian cloth even in Indian markets. Some commercialized cloth thus disappeared. But some other cloths that were not heavily traded before became commercialized during the colonial period.

Cotton textile is the most important example of a craft threatened by steam-powered technology. The threat came from Lancashire from the 1820s until the pre-war decade. Thereafter, the competition came mainly from the cotton spinning-weaving mills in Bombay and Ahmedabad. The power-driven loom is much faster than a handloom. Why, then, did the handloom survive at all? We have seen the answer already. It survived because it was more efficient in certain types of traditional clothing.



**a) James Hargreaves' Spinning Jenny, b&c) Edmund Cartwright's Power Loom**



As we have seen above, cloths that used very coarse or very fine cotton yarn, complex designs woven on the loom, and non-cotton yarn partially or wholly, tended to use the handloom. The most important example of a handloom specialty, one that is still made on a handloom, is a sari with designed border. In 1930, there were many more such cloths. Turbans, bordered dhoties, checked and striped lungies, were also common handloom items. By contrast, the mills dominated shirting, suiting, dhoties and simple saris, basically, any cloths that could be woven in long sheets with very simple design.

Even as handlooms faced competition in certain categories, in those classes where it had a comparative advantage consumption grew in the early 20th century. The increased consumption derived partly from increasing purchasing power of those rural regions that produced lucrative cash crops. It also derived from changes in clothing habits. For example, the depressed castes of South India began to wear a greater quantity and finer types of clothing from the turn of the century.

In handloom cloth, especially silk, long-distance trade was not a new invention. But trade almost certainly increased in extent in the second half of the 19th century. Imported and mill made cloth had destroyed many local weaving traditions. Thus it had reduced local transactions of cloth in rural markets or seasonal fairs where weavers and consumers often dealt directly. At the same time, wholesale trade increased. Similarly, long-distance trade in yarn, dyes, silk and gold-thread-all major raw materials for the handloom industry-became more extensive and more organized from the 1870s when these materials began to be imported or made in the mills. Handloom cloth also used these systems. Quite often the wholesale traders in textile raw materials were of weaver background.

### **The Supply Side**

About 1860, the usual system of work in weaving was the household. Inside a weaving household, one would generally see adult men working as weavers, adult women on winding and sizing operations, and children as assistants in both weaving and winding. By and large the family remained the usual type of unit in handloom weaving during and after the colonial period. But there was a noticeable expansion in handloom factories from the interwar period. These factories employed mainly migrant labour, and were established by persons who had made money in the relatively new trades in cloth, yarn, dyes, jari, or silk. They generally used improved tools. And they concentrated in major textile towns of western India.

Capital and labour involved in the handloom industry became increasingly mobile. There was migration from rural regions towards new points of trade, and towards the railways and spinning mills. The most important example is a migration into textile towns in western India such as Sholapur, Malegaon, Bhiwandi, Burhanpur and Surat. The weavers came from depressed or overpopulated regions like eastern Uttar Pradesh and the Hyderabad state (see Haynes and Roy, 1999, on migration).

Many new types of invention in handloom weaving became available for wide usage in the 20th century, largely due to the efforts of provincial governments in popularizing



**Fly Shuttle**

these instruments. It will not be wrong to say that this was the only significant example of government policy in promotion of traditional and modern small-scale industry. On the other side, the increasing wealth and knowledge of

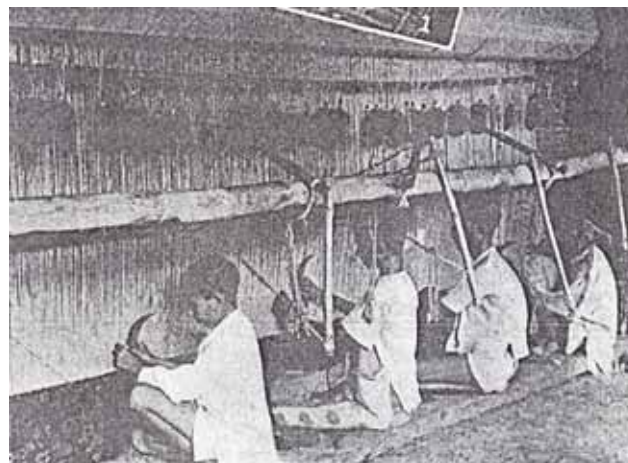
capitalist weavers, increasing certainty of their markets, made them more willing to try out new tools. The traditional loom was set up in a pit dug up in the living room of a weaver's home. The shuttle was thrown by hand across the width of the loom. From this system, there was change towards (1) the fly-shuttle loom, where the shuttle was moved much faster by ropes and pulleys, and (2) a type of loom mounted on wooden frame. The frame loom took up much less space, could weave longer lengths of yarn, and thus, became very popular with the handloom



**Fly Shuttle**

factories. The systems of preparing warp for the loom also changed. The use of a warp beam was popularized, with the effect that longer lengths of thread could now be woven. Warp preparation was previously a side activity of women in weaving localities. This form of collective labour was replaced by the warping factory. Another major example of technical improvement was the synthetic dyestuff.

A final stage in this process of endogenous technological change was the 'powerloom' factory. From the frame loom, the idea of a power-driven frame loom was a very



**Operation of Loom in Shaikh Gulam Hussun's factory, Amritsar, c. 1915 (Roy, Tirthankar, *Traditional Industry in the Economy of Colonial India*, Cambridge, 1999, p. 216).**

small step. Power-driven looms were constantly being discarded at scrap rates by the mills. So buying such a loom and reconditioning it to fit the weaver's factory shed was not expensive. Relatively well-off weavers started to replace handlooms by power-driven looms in products where such a switch was possible. The first such looms in India appeared in handloom towns about 1900 and were run with fuel oil. They spread

much faster from the 1930s when many such towns received electricity. These looms, of course, were run with power. By 1940, there were about 15,000 such looms, some in cotton, and some in silk and rayon. These had been started by persons of handloom background. The ground had thus been prepared for what was to become in the next few decades India's largest industry.

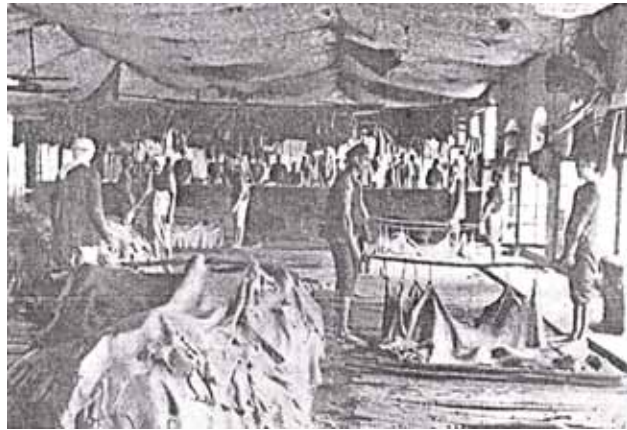
Through these changes and through the handloom factory, weaving and processing separated out as tasks, and thus specialization and division of labour increased by comparison with the household.

### **35.5.2 Leather**

Tanned hides and skins became a major export item in the late 19th century. From the 1870s down to the Great Depression (1930-37), it remained a major export. Thereafter, the export of tanned hides and skins fell, but hides were being used more and more as inputs by local leather manufactures, and the export of such

manufactures began to increase. Today, leather is one of South Asia's most important manufactured exports.

Tanning was originally a rural craft, and practiced by groups who were part-time agricultural labourers. They were very lowly placed in the caste hierarchy, and had little bargaining power in dealing with their main customers, the peasants. In most places hides were bartered for grain. But the terms of the barter were adverse for the suppliers. The grain-share of the leather artisans was much smaller than



**Tanning house, Cawnpore, c. 1915 (Roy, Tirthankar, *Traditional Industry in the Economy of Colonial India*, Cambridge, 1999, p. 178).**

their share in population. The usual organization in rural tanning was either a single household, or a kind of collective labour not ordinarily seen in other crafts. The tanning locality was set a little apart from the main village where the village was a large one. In this locality, men, women and children worked together in pits jointly owned.

The export market concentrated hide trade in Kanpur, Madras, Bombay and Calcutta. And the better quality demanded by foreign buyers of Indian hides encouraged factories in these cities owned by hide merchants. These developments weakened the rural barter system, because every one with hides now wanted to sell it to an exporter. It also encouraged leather artisans to migrate to the cities. They were re-employed there as factory labourers. In the course of this change, flaying, tanning and leather-manufacture—which were often performed by the same person formerly-separated out. Division of labour and specialization increased. The old customs did not completely vanish, but often persisted in the tannery in the form of direct or indirect hierarchy between workers and supervisors, and a tolerance for poor working conditions inside the factory. Still, the factory was a new and a freer system of work.

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## 35.6 LABOUR

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As we have seen, one of the most fundamental long-term tendencies in traditional small-scale industry has been the increasing employment of hired labour, or the growth of a labour market.

The tendency was most obvious when a rapid growth of factories took place. Small factories grew in four circumstances. First, they appeared in towns that received many migrants, such as handloom weaving in Sholapur. Second, factories appeared in industries that were relatively less skill-intensive, such as tanning of hides and skins. Third, factories appeared in industries that partially mechanized. The fourth circumstance occurred in some skilled crafts of northern India where merchants set up large sheds where master-artisans came with their teams of apprentices to work. Such sheds, however, did not really employ wage labour strictly speaking. Carpet weaving furnished one example, which will be referred again below.

Migration of artisans is intimately connected with the growth of factory labour. From the last quarter of the 19th century, there is record of steady and large-scale migration of artisan groups to industrial towns. Some of them gave up their craft to become

general labour. Some entered the mills. Still others only relocated their craft near sources of raw material and market points. Employment was typically in factories in these towns.

Factories and a visible labour market were not the usual systems though. Elsewhere, the emergence of a labour market was a more gradual and subtle process. As the skill-intensive industries commercialized, merchants put out work to producers who worked in traditional types of relationships. These firms recruited labour without full-fledged hiring. This happened in broadly two ways. Firms using mainly family labour employed workers from within the family. And masters hired apprentices. The family-firm and domestic labour was usual among Hindu artisans. The apprenticeship system was usual among the Muslim artisans. The latter was most clearly visible in the towns of western Uttar Pradesh.

These traditional systems tended to weaken and dissolve in the second half of the twentieth century, illustrated by the retreat of household industry in census employment data that we have seen above.

The decline of households and old-style apprenticeship suggest that traditional industries in India witnessed a change from social contract to unregulated labour market in respect of employing children and women. This process is yet to be documented from a historical perspective.

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## **35.7 CAPITAL**

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What were the sources of capital that flowed into the small-scale sector? Who were the capitalists investing in this sector?

### **35.7.1 Source of Capital**

Small-scale industry in general had little or no contact with the formal banking sector. It had very little contact even with the informal credit markets. The main form of working capital finance was trade credit, as it is even today.

There is evidence that it was easier to raise fixed capital loans in certain towns than in others. Surat, for example, was a major textile centre where employers and traders in the jari industry routinely gave loans to their contractors for purchase of machinery. How universal such practices were and why they occurred in certain towns is not clear.

### **35.7.2 The Capitalist**

The wholesale trader, the raw material importer, and the factory-owner were new types of capitalist. In some industries, notably handloom weaving, the capitalists tended to come from artisan communities. On the other hand, in an industry such as tanning, capitalists came from merchant communities. What determined which background the capitalists would come from? Three factors were possibly of importance.

First, differences in the level of skills mattered. In many handicrafts, craftsmanship was an important resource, and those who possessed such capital could often control the trade as well. In weaving, such logic worked more than in a relatively unskilled craft such as tanning. Second, whether a craft was export-oriented or home-market oriented mattered. In exportable crafts, the larger scale of trade and the nature of



the market made working capital and information both scarce resources. Here merchants had greater control over production. Third, social hierarchy mattered. For tanners, to either get loans for business or start a new enterprise could be difficult in the face of resistance from their upper-caste neighbours. Weavers, on the other hand, did not face such social sanctions.

### **35.7.3 Associations and Organizations**

Collective organizations usually play a number of important roles in traditional industry. Via such institutions, masters control the graduation of their apprentices into potential competitors, insiders control the entry of outsiders, and conflicts over industrial relations could be kept in check. Further, any business needs credit and insurance, which markets cannot function without either good laws or a lot of trust. Where these markets are undeveloped, trust is often ensured by collective organizations. In medieval Europe, the guild performed some of these functions. In India, guild in the formal sense was rare. Nevertheless, caste and community associations did develop to take care of some of these roles.

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## **35.8 SUMMARY**

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Economic historians often have a tendency to focus on the large industries and international trade in goods. This module emphasizes the need to look at the small producers, study the changes within artisanal production, and the significance of local trade in sustaining specific types of manufactures. Before the consolidation of the Europeans in the Indian Ocean trade, production in different regions was linked to particular trading networks: Central Asia in the case of Punjab, Red Sea and Persian Gulf with Gujrat, Southeast Asia with Coromandel. With the entry of Europeans the older networks were weakened, and the textile trade was re-oriented towards Europe. By 1800 the European bound trade dwindled and the local demand in fine handicrafts was affected by the decline of the nobility. There is no doubt that over the nineteenth century there was a decline of handicrafts, reflected in the substantial shrinkage in the work force. But this essay argues that there is no agreement as to the scale and the timing of this decline. Local studies show that the decline was often gradual and spread out over time and not as cataclysmic as it is often thought to be. Textile production survived because European imports could not displace the very coarse and very fine varieties of textiles. By the third quarter of the nineteenth century, the decline was in fact offset by a trend towards recovery - a process that may be described as re-industrialization. While the work force continued to decline, output increased. This was because of reorganization of production and technological changes within small-scale industries. This essay elaborates this argument through case studies of cotton textile and leather industries.

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## **35.9 GLOSSARY**

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<b>Apprenticeship</b>	A production relationship where skilled artisans or 'masters' recruit labour from their students or apprentices. Labouring is simultaneously wage-labour and a learning system.
<b>Commercialization</b>	Production (including production of labour power or supply of labour) for the market rather than for own use. The term can also be applied in the case of increasing production for long-



**De-industrialization**

distance or export markets. Usually it is used to mean a qualitative change in the process or relations of production.

This refers to two distinct arguments. (1) There was a large industrial decline in the early-nineteenth century. And (2) colonial India experienced a process of delayed or retarded development of capital-intensive industry, or some kind of opposite of 'industrialization'.

**Factory**

A shed where a collection of workers hired by the owner or manager perform production tasks.

**Factory Acts**

In England beginning from 1802 series of factory legislations (1802, 1819, 1815, 1831, 1833, 1834, 1840, 1842, 1844, and so on) were introduced to regulate the conditions of work, the working hours, the safety, and the sanitary conditions, etc in the factories.

**Fly Shuttle**

John Kay invented it in 1733. The weaver uses this by pulling a cord that triggers hammers to propel the shuttle left, then right, across the width of the cloth. The flying shuttle, fly shuttle or spring shuttle replaced the old weaving process of carrying the weft through the warp the shuttle had been passed by hand from side to side through alternate warp threads. In weaving two workers needed to throw the shuttle from one end to the other. With the flying shuttle, the amount of work a weaver could do was more than doubled, and the quality of the cloth was also improved.

**Guild**

Formal associations of masters or merchants to regulate competition, among other tasks.

**Industrialization**

Defined variously, as (1) increasing contribution of manufacturing to national income or employment, or as (2) increasing capital-intensity of manufacturing process.

***Ryotwari***

In the *ryotwari* settlement land revenue assessment was imposed on individuals who were the actual occupants. The system was introduced by the British in Bombay and Madras Presidencies and in Assam and Burma.

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## 35.10 EXERCISES

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- 1) Discuss the changes that took place in the Indian small scale industries during the late 18th and early 19th centuries.
- 2) Define the term 're-industrialization' in the Indian context. Examine the pattern of growth of Indian small scale industries during the late 19th and early twentieth centuries.
- 3) Discuss the changes within textile and leather industries in India during the first half of the 20th century.

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## 35.11 SUGGESTED READINGS

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