

## Leather & Footwear: Productivity & Efficiency Benchmarking

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In this section various parameters that are critical to achieve competitiveness in the manufacturing sector have been studied along with the progression of India vis-à-vis competing countries on the competitiveness protocol.

Most of the Indian firms are still in the Stage I of the competence protocol and targeting basic conveniences & cleaning up of operations to achieve competitiveness. Their efforts have been towards cost reduction (raw-material & logistics being the most prominent), increasing labour productivity, ensuring compliance to quality norms and engaging in continuous quality improvement efforts. Some of the aspects in Stage 1 like energy conservation, clean & safe working environment, etc. are still to be looked up as measures for competitiveness.

Amongst the competing countries, China has already crossed the first stage and has managed to fare well in the next stage as well with optimized capacity utilization and system improvements. The Italian & French counterparts have already crossed second stage and their present focus is on total improvement in systems & business processes by achieving total quality enrichment.

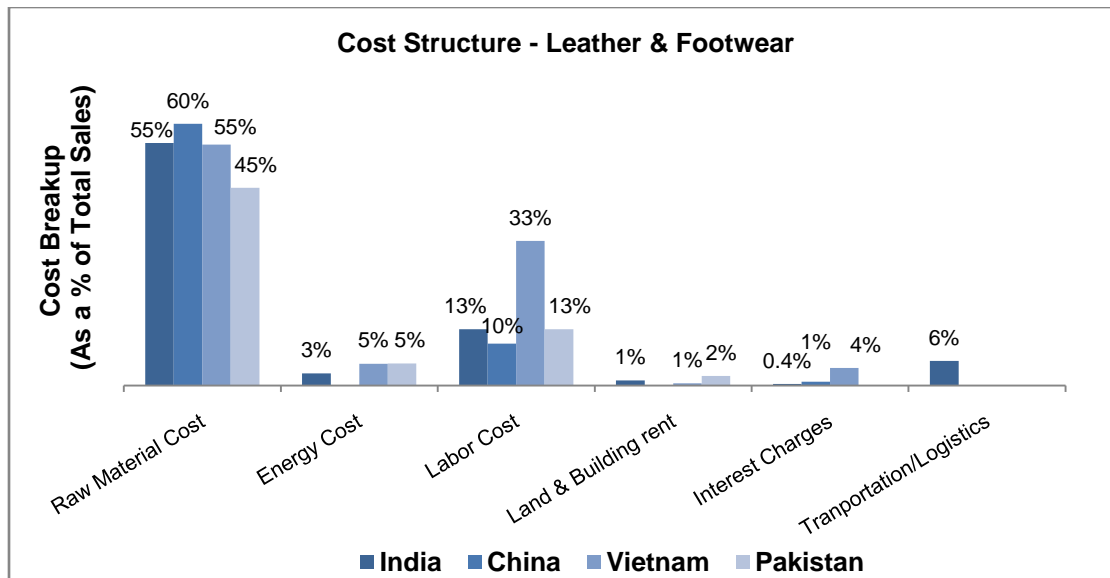
Detailed benchmarking results are formulated below:

### Cost Structure

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Cost structure encompasses all the expenses that a firm must take into account when manufacturing & selling a product. Various types of costs that are benchmarked in this section are: Raw material costs, labour costs (including wages), Energy costs, Interest charges, distribution expenses (including transportation & logistics etc.)

Margins can only be improved by increasing sales prices, or reducing costs. As prices in real terms for many of the industry's staple products have eroded over many years, the focus has long been on reducing costs. Cost reduction is one of the important parameters to achieve first stage of competence, i.e. targeting basic inconveniences, and cleaning up of operations. Most of the countries including India have not been able to achieve absolute competitiveness with respect to cost structure.



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

Pakistan enjoys an absolute advantage compared to other countries with cheapest raw material costs. Energy costs in India which are affected more by government action than by market forces are comparable with the competing countries as its labour cost.

Although China enjoys lower labour cost as compared to other countries, but industry experts believe that labour costs are increasing, on a yearly basis, and according to China's "12th Five Year Plan" the salaries will keep increasing by 13% annually in order to stimulate domestic purchasing power. Therefore, Chinese leather industry is likely to become less competitive over time. Besides, China will now focus on developing its manufacturing of medium and high valued goods as laid down in its "12th Five Year Plan" so prospects of leather industry of China may not be as bright as earlier.

Further, according to the World Bank Logistics Report, the logistics costs in China are less as compared to India; China's infrastructure is ranked higher than India's infrastructure in all the sub-sectors (Electricity, Water, Roads and Ports) which helps in its development of trade. Moreover, Chinese companies have access to technology owing to the foreign investments which also brought in the necessary technology.

Vietnam's exports covers majority of the countries in western and Eastern Europe. The EU remains the biggest export market for Vietnamese shoemakers. The EU announced an anti-dumping tax rate of 10% on Vietnam-made shoes. The 10% tax rate on Vietnam's products, according to analysts, proves to be not the "worst scenario", especially as corresponding duty on China-made shoes was 16.5%. The lower tax rate on Vietnam-made shoes has made Vietnam relatively competitive over China in the EU market.

Off late, countries like China, Vietnam have been facing a tough competition in the EU markets from countries like Romania, as Romania provides a cheaper outsourcing option for manufacturers in western EU countries, who wish to outsource production to lower cost suppliers. The main advantages of the Romanian footwear sector include: competitiveness of the footwear products in foreign markets; high adaptability of the sector to market requirements; skilled and cheap labour force; competitive environment within the sector, given large number of manufacturers. Prices of footwear are lower in Romania than any other EU country hence explaining the huge exports to Italy. In fact, footwear prices in

Romania are nearly half the EU average, hence giving an edge to Romania for exports. The main feature of the footwear industry consists of the high level of outsourced production for EU footwear manufacturers, referred to as 'lohn type system' in Romania. This refers to the use of Romanian labour in conjunction with the import of capital, raw material and technology. This type of contract is used in a number of related industries.

India with its capability of producing niche products has a lot of potential in markets like Italy, Spain & Chile. Italy faces high costs of labour. While in Italy, labour costs accounts for 38% of the production costs, it is less than 10% in India. That trade of leather goods between India and Italy has growing and can be further increased because many Italian companies are looking at joint ventures with India companies in leather sector.

While India has the highest buffalo population in the world and exports leather to various countries including China, still it does not have competency in raw material cost. The primary reason is lack of availability of high quality raw material (leather) from Indian abattoirs. Indian manufacturers of leather products have reported frequent issues of cuts, marks on the skins, etc. Due to this, India needs to rely on imports of high quality raw material. Further, there are reported issues of price regulations of hides & skins provided by abattoirs, which further puts cost pressures on manufacturers of finished leather & leather products. Apart from these issues, there is limited availability of cow leather in India because of ban of cow slaughtering in various regions. Thus, Indian firms have to rely on imports of cow leather.

Further, there are segment specific issues in raw materials that impact the competitiveness of the overall sector:

For Leather Footwear sector, there is very limited indigenous production of non-leather raw materials like synthetic leather, laces, PU soles, insole board, steel toe caps etc., due to which most of the footwear manufacturers have to rely on imports. This further puts costs pressures on Indian manufacturers.

For Leather apparel industry, finished leather fur is not easily available in India, hence it is imported which adds to the cost of Leather Apparel. Further, critical non-leather inputs such as cotton lining also have limited availability in India.

For Leather Goods industry, most of the metal fittings and accessories are being imported from Taiwan, Japan, and Hong-Kong, China etc. since there is limited availability in India which leads to increase in overall raw material cost.

In tanning industries, there are chemicals that are used for dyeing like Oils & Fats; Synthetic tanning agent etc. that are being imported mainly from Europe, since there are very strict regulations in Europe market for the use of chemicals. These chemicals are imported at 36% duty which adds to the overall cost of product of finished leather and in turn affects the cost of leather products, which use finished leather as an input.

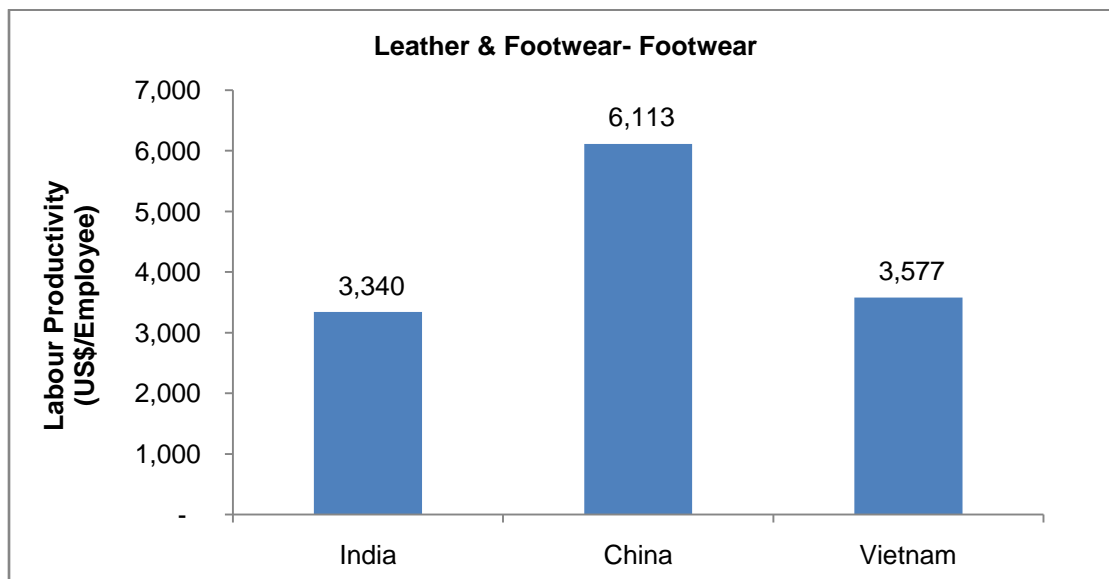
Furthermore, since most of the big leather clusters in India like Kanpur, Agra, and Delhi etc. are land-locked regions, transportation & logistics cost is higher in these areas, especially for exports. In dearth of any schemes for subsidization of transportation, these places become less cost competent.

## Productivity

Labour Productivity is the measure taken for benchmarking the productivity of Indian Leather & footwear industry vis-à-vis competing countries. Labour productivity has been estimated as a ratio of Gross value added (GVA) to the number of workers.

Higher labour productivity of competing countries (China & Vietnam for leather footwear, Pakistan & Italy for leather apparel and China & France for leather goods) is one of the sources of competitive advantage over India. This shows that competing countries, China, France & Italy in particular have been able to successfully manage system inefficiencies and have been able to progress towards next stages of competitiveness.

### 1. Footwear

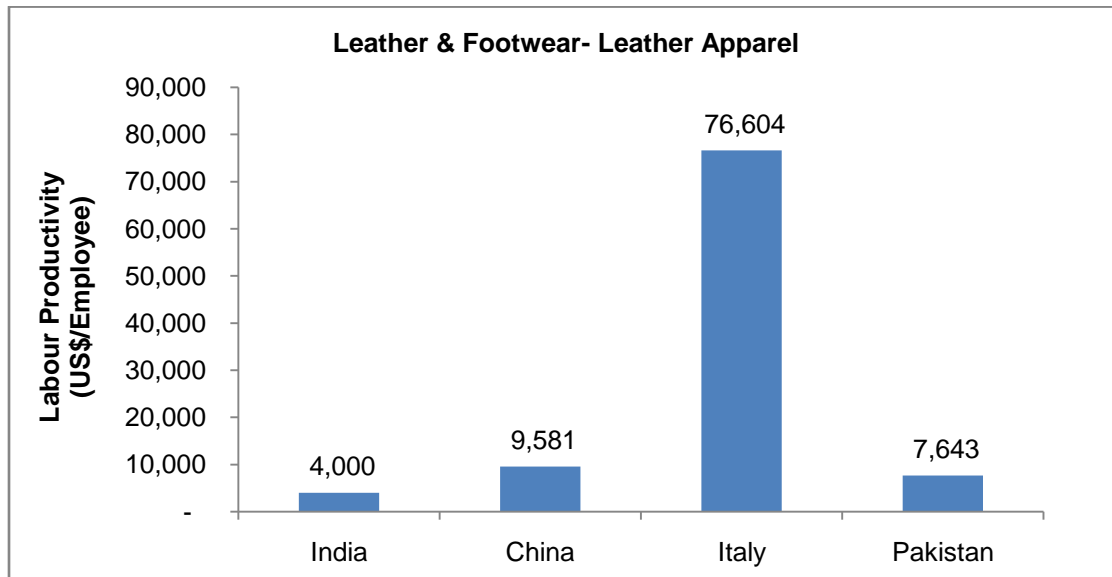


Source: UNIDO

China is emerging as the leader in labour productivity in Leather footwear segment; with labour productivity nearly double that of India & Vietnam. China has been able to outperform both India and Vietnam because of very high gross value added, though it has a large pool of labour force as compared to the other two competing countries. India lags behind the competing countries in labour productivity because of strict labour laws as compared to countries like China which impacts overall labour productivity. China's labour policies are perceived as more employer friendly than India's labour policies. As a result, there are reported issues of long absenteeism from work, lower levels of efficiency in work, and other issues which impact overall productivity of the labour force. Further, there is an ageing labour in Indian leather footwear industry and there is dearth of new skilled people joining the industry which is another reason for lower productivity of Indian firms. On skills side also, Indian labour force is lagging behind competing countries. In Leather footwear industry, India lags behind Chinese & Vietnamese counterparts in preparing shoe uppers. There is lack of technical knowhow of machinery that is used for shoe upper manufacturing. Another reason lies in the composition of Indian workforce viz.-a-viz. competing countries. Most of the leather footwear clusters of India like Kanpur, Agra & Delhi have

very high percentage of male labour force as compared to women labour, while the trend is different in China & Vietnam. Women workforce, being more productive thus gives competing countries an advantage over India in labour productivity.

### Leather Apparel



Source: UNIDO

India is lagging behind Italy by a huge margin, with Italy managing labour productivity of almost twenty times that of India. Italy has been able to achieve higher gross value added to the tune of ten times that of India with less labour force than India. Labour productivity of India is dismal primarily because of limited automation in Indian leather apparel industry and more than 80% of the work is manual. Even the very basic activities like cutting, sewing etc. are done manually in majority of Indian enterprises. Further, as witnessed in Leather Footwear, there is dearth of new skilled labour especially skilled tailors, cutters, helpers and skilled masters who are able to produce newer patterns. As opposed to Leather Footwear industry, a large proportion of women workforce is employed in Leather Apparel industry, but since there are strict laws which stops women labour to work for late hours in the night even if they are willing to do so, the overall productivity takes a hit.

Apart from labour, the other factor which impacts the labour productivity of Indian enterprises is the order size, which is often very small and therefore scale of production cannot be achieved. Another reason is that very few Indian firms have in-house design facilities due to which the value addition in the product is very limited and only basic patterns are being produced, which are then exported to European countries like Italy where further value addition is done on the back of superior design capabilities.

## 2. Leather Goods



Source: UNIDO

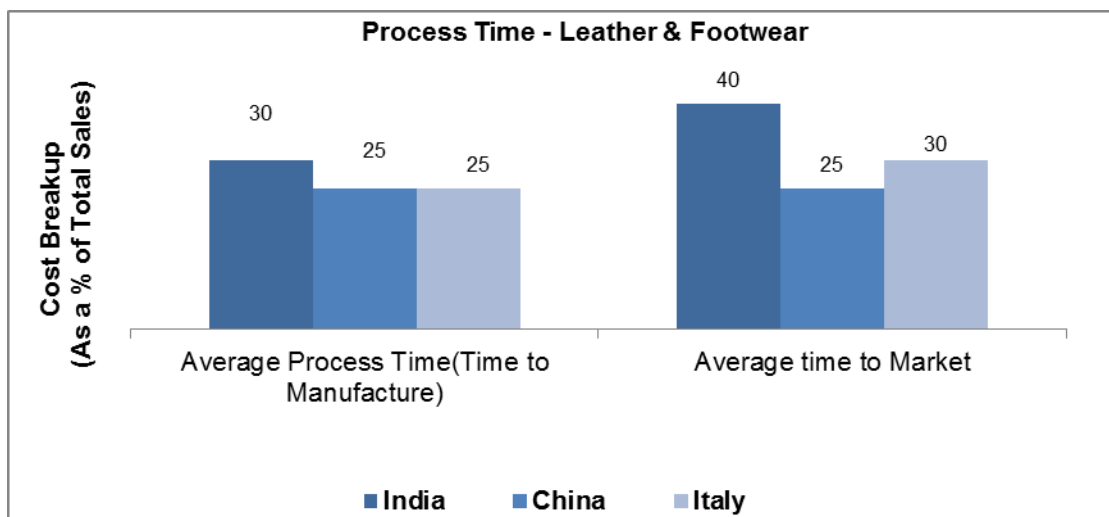
India is lagging behind both the competing countries by a huge margin, while France is a clear leader in labour productivity in leather goods segment. The reasons for low productivity of Indian leather goods industry are similar to that of leather apparel industry, i.e. lack of new skilled labour, strict labour laws as compared to competing countries impacting productive hours of labour force and very limited automation in production.

Further, lack of in-house design facilities and small average order size impacts the overall gross value added thus impacting the labour productivity.

## Process Time

Process time is a very important parameter for competitiveness as it is indicative of the overall time a firm uses for production and reach to the target market. Countries which are able to achieve faster turnaround time and have quicker time to market generally enjoy competitive advantage in the market. Various parameters which are considered for comparison in this section are: Average Cycle Time, Average time to market and Average stock in hand (average inventory held by a firm in terms of number of production days). Higher labour productivity and lower process time signifies that both China & Italy have been able to overcome basic inconveniences and moved on the next stages of competitiveness.

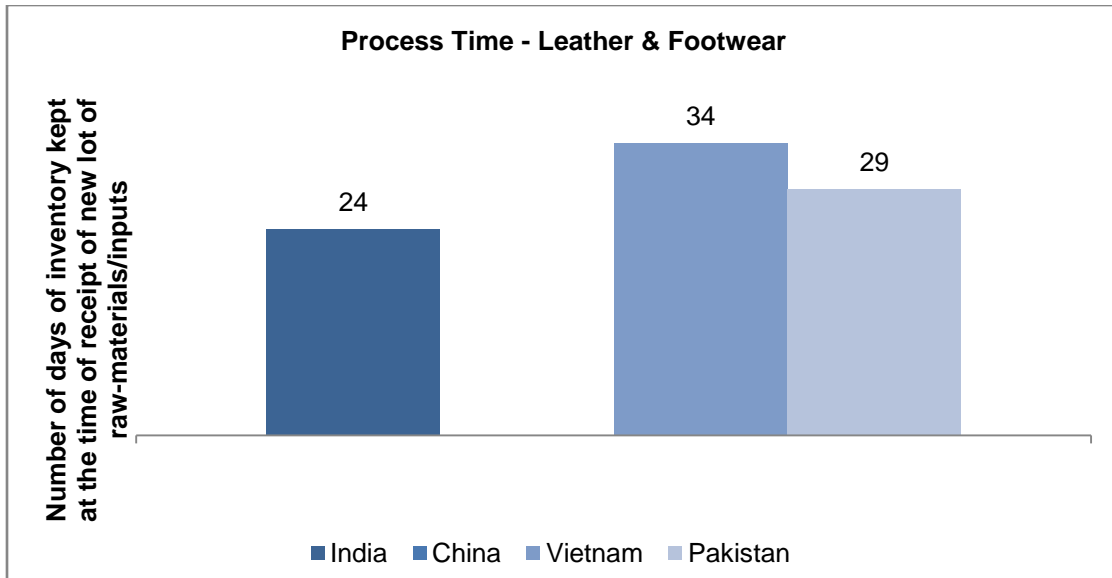
India stands at clear point of disadvantage as compared to competing countries (China & Italy) because of higher process time as depicted in the charts below:



Source: D&B Analysis

India stands at a point of disadvantage in terms of average time to production as well as average time to market as compared to the competing countries. The former is lower because of several reasons like: Less working hours in India, inconsistency in raw material availability, lower labour productivity, inconsistent power supply and lower order size.

Average time to market is lower because of delay in customer clearance of exports and documents preparation. Further, land locked areas have to ship the materials to port which is then further sent for exports, which adds to the delay in time to export. In contrast, China, Italy & Vietnam take very little time to arrange for customs clearance for exports; with China & Vietnam taking minimum number of days for custom clearance for imports. India's disadvantage implies that, the delivery of imported raw material to the factory is delayed which could delay the entire production process. Further, delay in custom clearance of exports means that the delivery to the overseas market is delayed by a fair margin and deliveries with tighter schedules would suffer as importers would look for other supplier countries for such kind of products.

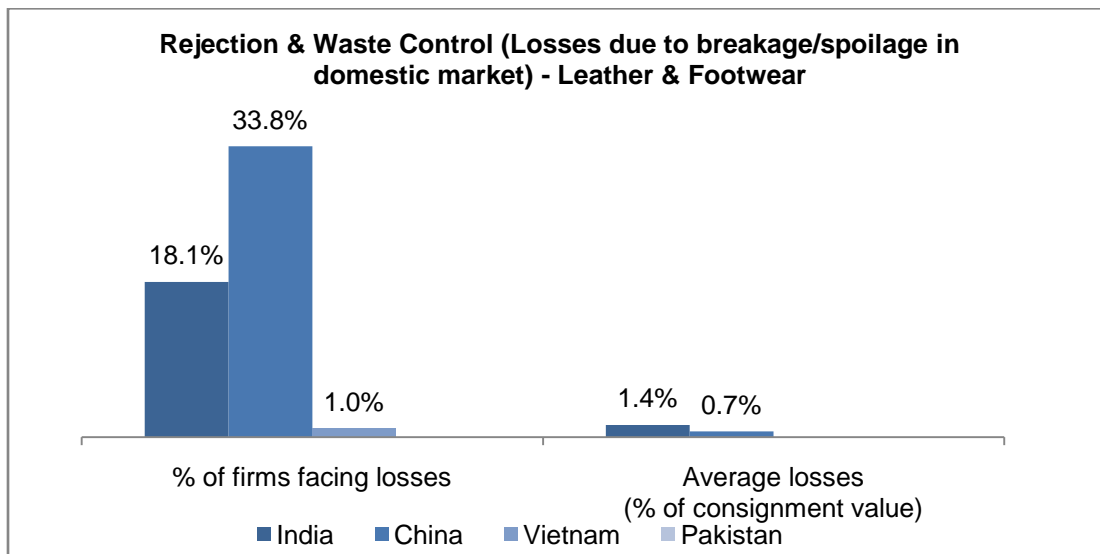


Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

As evident from the chart above, India has the lowest value of stock in hand as compared to competing countries signifying comparable efficiency in production process. Although Indian firms are performing better than competition they need to work towards just in time production process to build and sustain its competitive advantage.

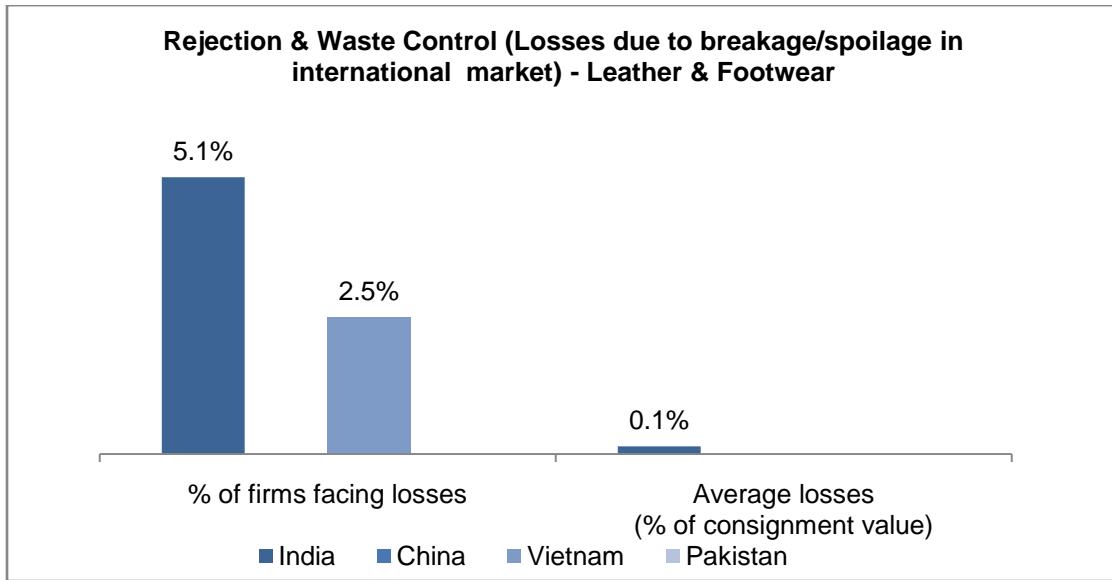
### Rejection & Waste Control

In this section, wastage/losses due to breakage or spoilage have been analysed for India vis-à-vis competing countries. The firms' endeavour is to keep the rejection and waste to the minimum as it is an overhead costs for a firm. The charts below depict that India's comparative advantage against competing countries in rejection & waste control process.



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank



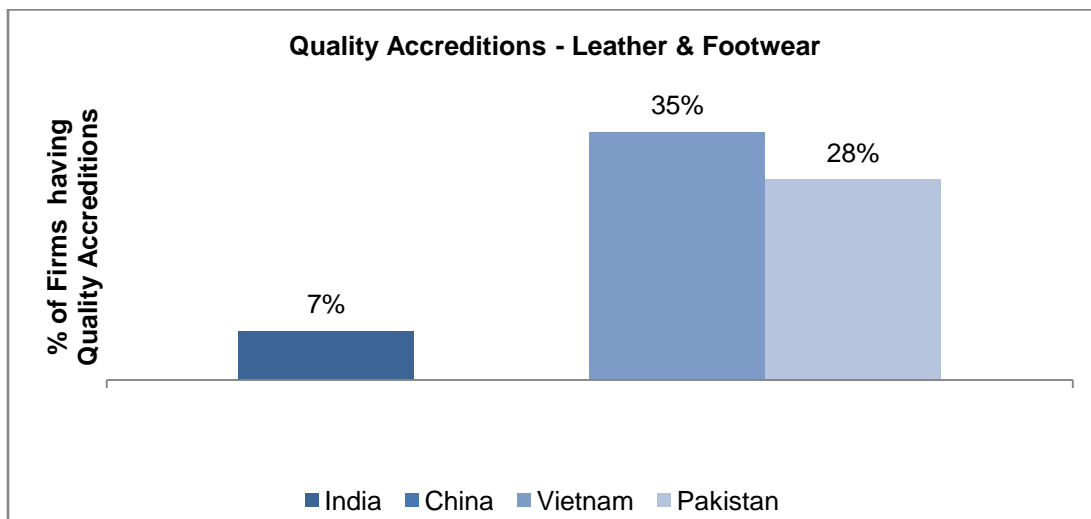


Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

While domestically India fares better than China, it is way behind compared to Vietnam in domestic as well as international losses.

### Quality Accreditation

Quality accreditation is an important parameter for competitive advantage as it would enable a firm to increase its market reach. Most of the buyers use quality accreditation as a parameter to evaluate a supplier and in some cases they have a mandate to buy only from firms with desired accreditation. Further, quality accreditation has direct impact on productivity as it would require tightening up of processes and giving away inefficiencies. India's comparison on quality accreditations with competing countries is depicted in the graph below:



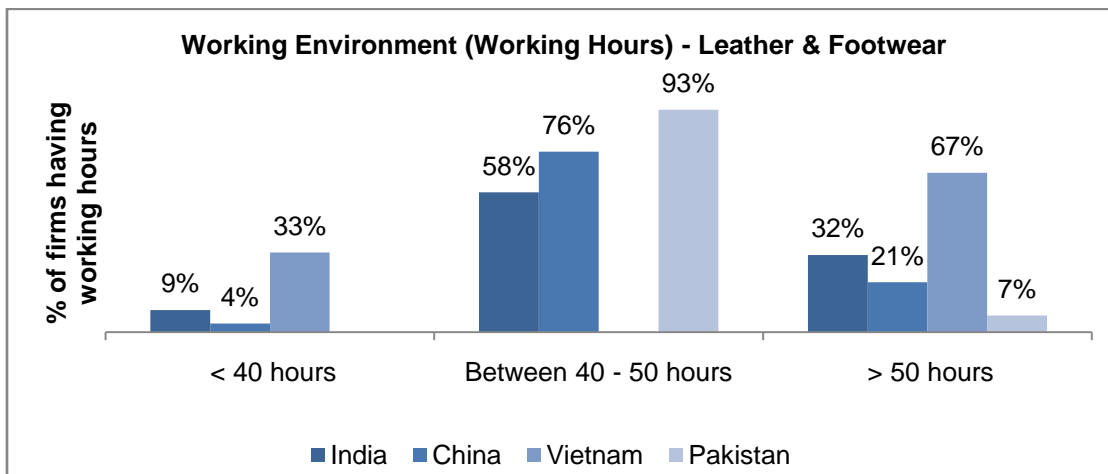
Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

India has performed poorly in comparison to Vietnam and Pakistan, both of which have more number of firms having accreditations such as ISO, NEQS, etc. Most of the firms have limited knowledge and awareness of the quality standards that are to be followed to be competitive in the international markets. Further, there are many quality standards being enforced by European markets like REACH for chemicals used in leather tanning process which need to be followed by companies in order to supply in these markets.

In China, for instance; Ministry of Industry and Information Technology introduced a group of newly approved standards for 359 industrial sectors, including 20 standards for leather industry in China. There are 4 for leather shoes, 9 for leather bags and luggage, 4 for leather processing, 2 for leather markets, and 1 for leather accessories. These new standards are introduced for the purpose of industrial contamination control and reassurance of products' quality. These standards have already been applied since 1st April, 2011.

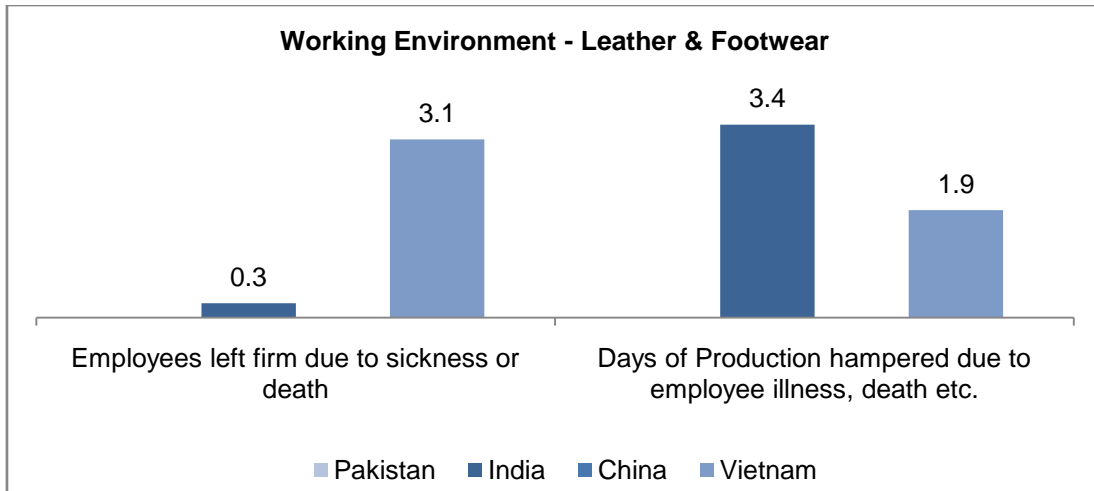
### Working Environment

The work environment has huge effect on the performance of employees which in turn impacts the overall productivity of the firm. The type of work environment in which employees operate determines the way in which such enterprises prosper. In this section, India's work environment has been compared to competing countries (China, Vietnam & Pakistan) by evaluating the working hours in firms within these countries:



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

India has lesser chunk of firms that maintain average working hours per week of 50 and below. Although India is doing well as compared to Vietnam, it still has substantial percentage of workforce working for more than 50 hours per week.



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

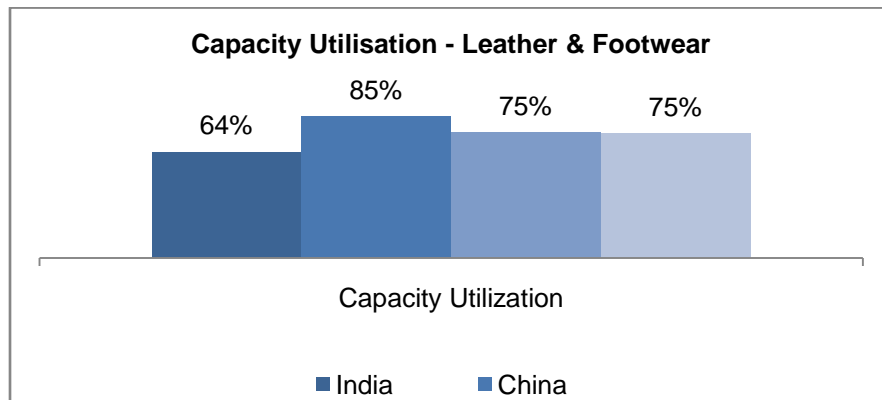
India fares better than Vietnam in employees leaving the firm due to sickness or death, but loses out on more man days due to employee illness and death.

### Capacity Utilisation

Capacity utilization is a metric used to measure the rate at which potential output levels are being met or used. Displayed as a percentage, capacity utilization levels give insight into the overall slack that exists in the economy or a firm at a given point in time and refers to the extent to which an enterprise or a nation actually uses its installed productive capacity. Thus, it refers to the relationship between actual output that 'is' produced with the installed equipment and the potential output which 'could' be produced with it, if capacity was fully used.

As witnessed in the earlier sections, competing countries like China, Vietnam etc. have been able to manage inefficiencies and concentrate on targeting primary systems. This section signifies that China has been faring well in this stage and progressing gradually towards the last phase of competitiveness.

India's comparative disadvantage as compared to competing countries (China, Vietnam & Pakistan) in capacity utilization is shown in the graph below:



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

As depicted in the chart above, India is lagging behind all the competing countries in capacity utilization with China emerging as the leader in capacity utilization. This means that Indian firms are not producing to the full potential of installed equipment.

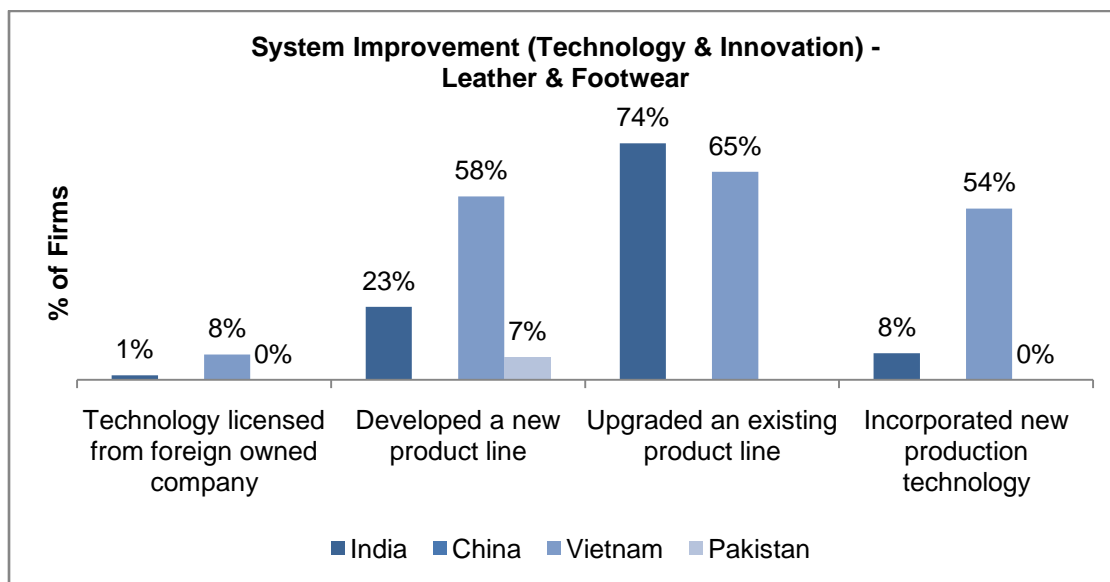
The main reason for such deficit in terms of capacity utilization is the inconsistency of export orders, especially in the light of current recession. Exports to Europe & US have taken drastic hit.

Another reason for underutilization of capacity is frequent breakdown of machinery. Average age of machinery used by Indian firms is more than 10 years; hence chances of breakdown are more. Availability of electricians, hydraulic & pneumatic technicians is also an issue which hampers production in case of machine breakdown. Inconsistent power supply, inconsistent raw material supply and labour availability also lead to capacity under-utilization of Indian firms.

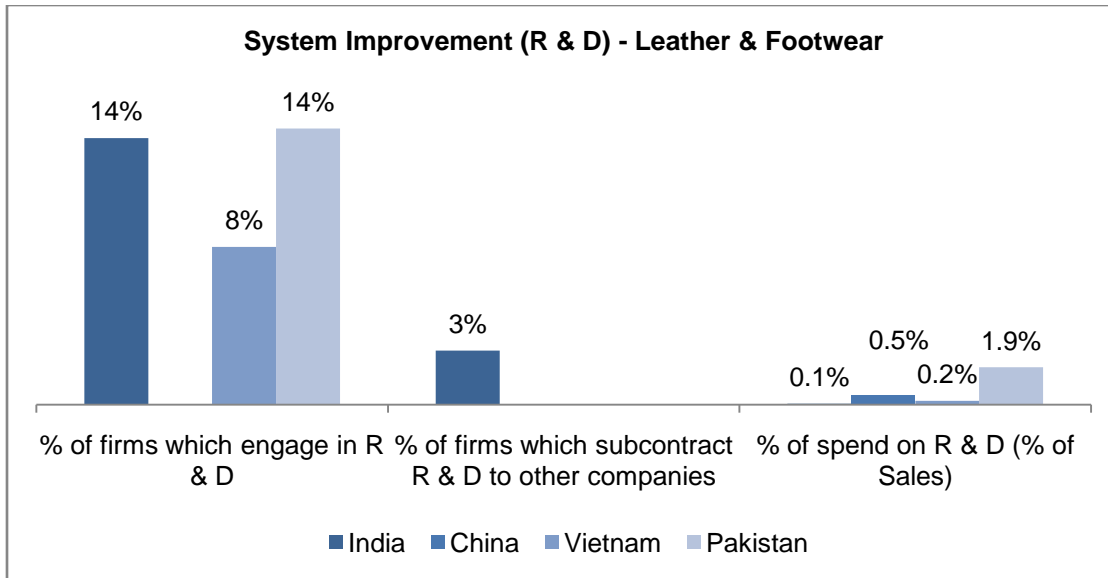
### System Improvement

This section examines the extent of innovation and technology being employed by the firms which would lead to overall improvement in production systems and have direct impact on productivity and ensure sustainability of the same in long run. Various parameters that have been compared in this section are: Development/Up gradation in product line or production technology, Investment in research & development and investment in training & development of employees.

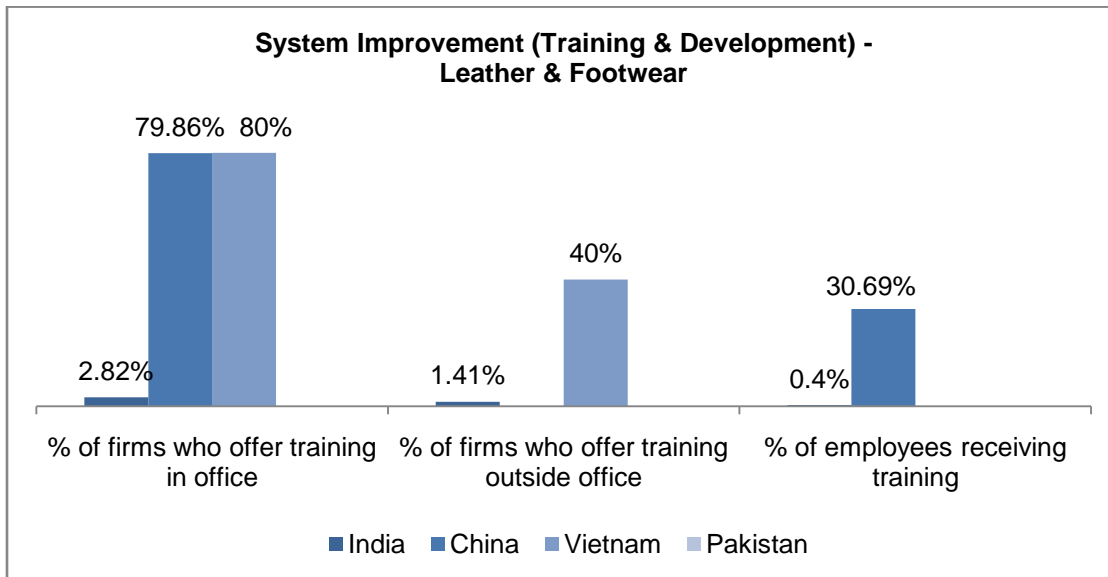
Both China & Vietnam have been able to fare well in this stage and have achieved significant system improvement by employing relevant training programmes and investing in research & development efforts.



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

While the Chinese firms are very active in developing & incorporating new product line, Indian firms have been most active in upgrading the existing production line. Indian firms have not been very active in incorporating new production technology as compared to Vietnam where a larger chunk of firms are adding new technology. This is primarily because most of the firms in this sector are either small or medium enterprises having very little risk appetite and not inclined towards investing in newer technologies. There is very limited collaboration for R&D with industry and hence the research & development is not reaching the masses. Further, SME's & MSME's which constitute majority of leather & footwear industry in India have been able to utilize the benefits of R&D efforts of CLRI.

In terms of training, although there is presence of training institutes, but the relevance of courses and its application to industry is a point of concern. Institutes like CFTI are engaged in training only for

supervisors and not for the labour force. Further, specific skills like dyeing, tanning etc. are not being provided to the workers.

On the other hand, competing countries have done a lot of work in the area of system improvement and R&D for leather sector. For instance, Conciaricerca Italia, the organization promoted by UNIC, is active in research in Italy. It supports projects concerning technological innovation, training and research in the chemical field with the aim of modernizing tanning processes. An organization known as the Experimental Station for the Leather and Tanning Industry (SSIP) was founded by decree in 1885; it is administrated autonomously and is monitored by the Ministry of Economic Development. SSIP was set up to carry out chemical research and offer assistance to tanning enterprises. Further, to foster R&D, tax credit, policy was established for research in December 2010 and subsequently replaced and strengthened, in May 2011, by a tax credit for companies financing research projects in universities or public research bodies equivalent to 90% of the additional expenditure in 2011-2012 compared to the 2008-2010 average.

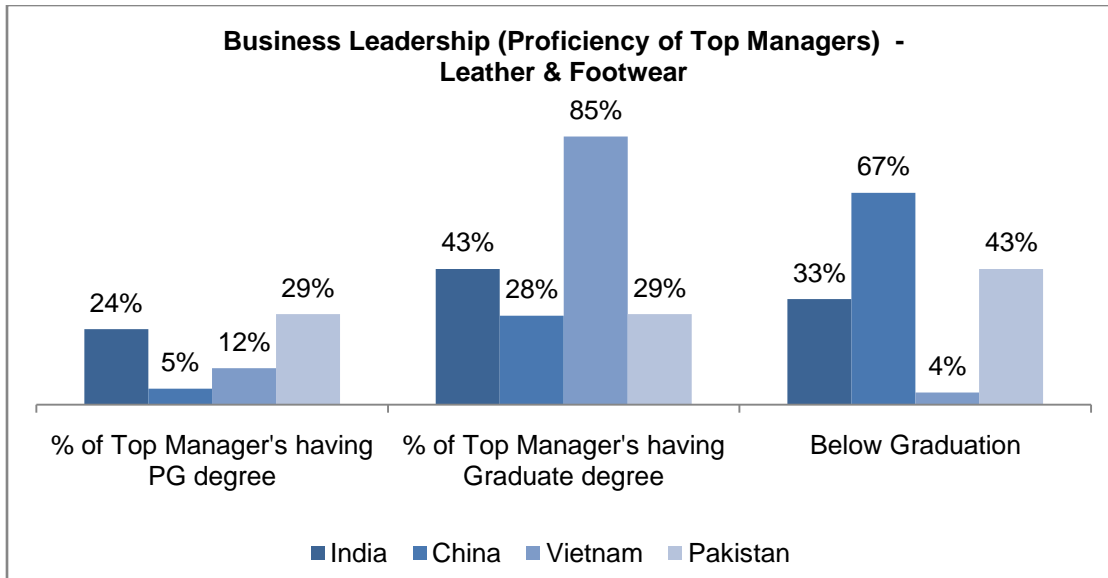
Over the past 20 years, the leather industry in Sichuan (China) province has made considerable progress, showing a trend of typical cluster development. In cities of Chengdu, Leshan, Yan'an, industrial chain is formed for leather production with extension industries of leather garments, shoes, and leather chemicals. Sichuan also has the state-of-the-art leather technology personnel in the country. As the top research centre in Asia, the Leather Research and Development Department of the Sichuan University has the advanced customized shoe equipment and measurement instruments. The Leather Engineering Department of Sichuan University, the Leather Chemical and Engineering Key Lab of the Ministry of Education and Chengdu Institute of Organic Chemistry of the Chinese Academy of Sciences are the leading leather research institutions in the country and there are a large number of experts in leather industry well-known at home and overseas as well. The new technologies which have already been adopted in China's leather industry are Ultrasound, Microwave and high pressure, etc.

Further, even as compared to Pakistan, India's leather does not enjoy as good a reputation in the global markets. Indian cattle have comparatively thinner skins and hides than those of their counterparts in Pakistan.

## **Business Leadership**

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Effective business leadership is a critical element in any organization and impacts the overall organizational culture and plays a part in productivity of the organization. Various parameters that have been compared in this section to measure business leadership are: Proficiency of top managers (measured by educational capabilities) and Experience of the top management.



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

As evident from the chart above, India fares better than most of the competing countries with respect to percentage of top managers having higher education degrees, while Vietnam is a clear leader with almost 97% of the top management being graduates and above.



Source: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank

India and China clearly have a fairly inexperienced top management as compared to other competing countries viz. Brazil & Thailand with more than 93% of top management having experience of less than 20 years as compared to Vietnam & Pakistan who don't have any top manager having experience of less than 10 years.