

Socio-Economic Status and Health Risk among the Carpet Workers: A Study of Bhadohi City

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Abstract— Bhadohi is the centre of the carpet industry and has excellent employment potential in the carpet manufacturing process. In the year 2010, the carpets manufactured in Bhadohi belt received the Geographical Indication tag. This paper explores the socio-economic status and health risk of carpet manufacturing workers and highlights the significant problems the workers faced in the study area. The Bhadohi city is selected as the study area, located in district Sant Ravidas Nagar (Uttar Pradesh). The study of the carpet workers is based on both Primaries as well as Secondary sources of data. The survey results show that most carpet manufacturing workers work 10-12 hours daily in the study area, which is very much arduous and monotonous work. The study also reveals that most carpet workers experienced health problems in the workplace. The most commonly reported health problem are chest pain, skin irritation, eyes irritation, backache / joint ache, headache due to long hours of continuous sitting at one place. The researchers suggest that the Ministry of Textile, Government of India, should be given the Start-up finance to the Bhadohi city entrepreneurs to promote this industry, which may help in nation-building.

Keywords: Carpet, Socio-economic condition, Health, Workers, Industries

I. INTRODUCTION

Handicrafts are a replication of the cultural expansion of society. The Indian handicraft sector is export-driven mainly due to high demand in the worldwide market. Handicraft production in India is spread across the country; almost every state is well-known for its unique design and colour. The major handicraft centres are kanjeevaram sarees of Tamil Nadu, wood ware of Saharanpur, hand-knotted carpet of Bhadohi, and Pashmina shawls of Jammu and Kashmir. Small scale industries play an essential role in the economic development of both developed and developing countries. It provides employment opportunities in the rural and semi-urban areas of the country. The small scale and cottage industrial units are quite significant in achieving various social goals such as removing poverty, attaining self-reliance, reducing disparities in income, wealth, and living standards and regional imbalances. Carpet industries in India are one of the oldest and most popular industries in the world. The Indian carpet industry is a rural-based cottage industry that has been one of India's most crucial sectors contributing hugely to its foreign exchange through exports. It has immense potential for the nation's economic growth and development, especially in India. Carpet industries in India flourished more in the northern part of the country. So, major centres of the carpet industry are located in Kashmir, Jaipur, Agra, and Bhadohi-Mirzapur region. The carpets that are produced in India are exported to a different part of the world. Bhadohi is listed among the most significant handmade

carpet weaving clusters in India. About 3.2 million people are engaged in this sector, and now they are considered one of the biggest cottage-based industries. Carpet manufacturing goes under several processes like carding, ginning, spinning, dyeing, weaving, etc. The workers who are engaged in carpet manufacturing are skill and unskilled. In 2010, the carpets of 'Bhadohi received the Geographical Indication tag,' which means carpets manufacturing in 9 districts of the region, Bhadohi, Mirzapur, Varanasi, Jaunpur, Allahabad is tagged with "Handmade carpets of Bhadohi." Health has been a matter of widespread distress in all times of history and has attracted to the attention of the academicians, planners, policymakers and researchers. Health is considered the most significant component of well-being and essential for a society's balanced growth. The future of the nation lies with its healthy population, and the sick population is a liability. Health is the utmost importance, and it becomes the top in priority that has given the full attention and focuses by every individual and society. A healthy population is indispensable for the economic growth and development of the nation. According to the World Health Organization, the main determinants of health include income and social status, social support networks, educational and literacy level, employment the social and economic environment, the physical environment and the person's individual characteristics and behaviours, personal health practices (yoga), health care services etc.

Broadly speaking, there are numerous health and safety issues associated with carpet industries; the accident may occur due to out-dated machinery failure. The workers engaged in the manufacturing inhale a significant amount of cotton dust, wool dust and other particles, leading to respiratory disorder among the carpet manufacturing workers. The symptoms of diseases like chest pain, coughing, skin irritation, eye irritation and shortness of breath are most common in worker engaged in carpet making. The worker's serious health effects are ignored because its results are not immediately visible due to the absence of pain. Carpet industries are unorganised sector in this worker may work 10-12 hours a day, which directly affects the worker's health. Health plays an essential role in the growth and development of any industries.

Sl. No	Name of Carpet Company	Place
1.	Indian Art Gallery	Bhadohi
2.	Teppich de Orienta	Bhadohi
3	Saif Carpet	Bhadohi
4.	OBEETEE Pvt Ltd.	Mirzapur
5.	Jansons	New Delhi
6.	United Overseas	Panipat
7.	Gloster Limited	Kolkata
8.	Jaipur Rugs	Jaipur
9.	Jr Exports Pvt Ltd.	Varansi
10.	Flora Exports	Panipat

Source: All India Carpet Manufacturing Association (AICMA), Bhadohi, 2018.

Table 1: Major Carpet Companies in India

II. REVIEW OF LITERATURE:

The carpet industry has been dealt with by various scholars from time to time. This sector has been the thrust of the study of different countries. It has been studied from a different dimension in each region. The countries like Iraq, Iran, Afghanistan, and Turkey have taken it variedly at a broader sense of socio-economic because these countries are the origin of the carpet. Countries like America, Germany, and Canada dealt with it broadly in economic development because they import countries instead of manufacturing. There are some selected literature has reviewed for this paper.

- 1) Kumar Pandey (2015) states that the absence of countless factors, such as raw materials, money, and machinery, are the Indian carpet industry's main challenges.
- 2) Ruchi Tyagi (2012) Examine that Jaipur Rugs as an example of a carpet manufacturing company involved in social improvement and providing sustainable development to all those who are part of its carpet-making value chain.
- 3) Misbah Jahan (2015) illustrated that the handmade carpets future potential is vast and improved infrastructure can be the main factor in enhanced productivity.
- 4) T. S, Sanjay (1982) Identified that carpet weaving is the primary cottage industry in India and employed thousands of artisans. He added that Bhadohi-Mirzapur belt in Eastern Uttar Pradesh contributing the bulk of production roughly 80per cent while other major producing centres in India are J&K, Agra, Jaipur, Amritsar, and Gwalior but contribute very less proportion of the rest of the production and employment in the industry. According to him, the fortune of the carpet industry depends on the behaviour of the international market.
- 5) Sheobhal Singh (1979) concluded that how the organisational structure was connected with entrepreneurial activity and what sort of actively determines entrepreneurial success and economic development. The carpet industry has spread many parts in India, but the Bhadohi carpet industry is the leading one and the area known as "Bhadohi Mirzapur belt." The manufactured carpet of Bhadohi is luxuriant items to sell into the world market at a higher price and played a significant role in the economic development of Bhadohi.
- 6) Raj Kumar Subedi (2015) critically examined that occupational safety and health are an ignored area in small scale and cottage factories in Nepal. The study also reveals that workers were not received health education and medical treatment services at factories.

III. STATEMENT OF PROBLEMS

Bhadohi is the centre of the carpet industry and has tremendous potential for workers' employment in the carpet

manufacturing process. Although it is listed amongst the luxurious items, the carpet workers' socio-economic conditions are still pathetic and need proper attention. In carpet industries, many skilled and semi-skilled workers are required in various activities of manufacturing. The weavers and other workers engaged in this industry are entangled in the vicious circle of poverty, fatal diseases, overtime working hours, etc. The worker's living conditions are inferior; there is no proper sanitation facilities and safe drinking. They are unable to meet their household expenses and cannot send their children for education due to a lack of family planning measures. Due to pathetic working conditions at the workplace, the workers suffered from various major and minor diseases. The major diseases include tuberculosis (T.B), Asthma, Lung problems; Malaria, Dengue, loss of eyesight, and the minor ailments are back pain, headache, and gastric problem due to continuous working hours. The researcher is very keen on observing and analysing the carpet worker's socio-economic status and health-related issues of the carpet workers in Bhadohi city. The study will be very fruitful for the carpet industry entrepreneurs, policymakers, and the Ministry of Textile (Govt. of India).

IV. OBJECTIVES OF RESEARCH:

Keeping in the view of aspects of Socio-Economic and health status of Carpet weaving workers in Bhadohi city, in particular, the following objectives have been taken into consideration:

- 1) To know the Socio-Economic status of carpet workers in the study area.
- 2) To highlighted the problem faced by workers in the carpet industry in Bhadohi city.
- 3) To identify the various diseases faced by carpet workers in the study area.

V. A GEOGRAPHICAL SCENARIO OF BHADOHI CITY:

The present study is conducted in Bhadohi city, a part of district Sant Ravidas Nagar lies in eastern Uttar Pradesh. Bhadohi is famous in the world by the name of 'Carpet City.' The total population of Bhadohi city is 94,620, of which 49639 are males while 44,981 are females as per the report of the census of India 2011. Its latitudinal extent is 25° 9'N to 25°32'N, and longitudinal length is 82° 14'E to 82° 45'E. The Bhadohi is a Nagar Palika Parishad divided into 25 wards. Bhadohi city has total administration of over 13,274 houses to which it supplies basic amenities and facilities like sewerage, water, and roads. The literacy rate of Bhadohi city is 72.60per cent higher than the state average of 67.68per cent (Census 2011). Bhadohi is a centre of carpet industries; out of the total population, 28,036 were engaged in the work or carpet manufacturing activities, out of which 22,458 were males while 5,578 were females. Of the entire 28036 working population, 72.67per cent were involved in the main work while 27.33per cent of total workers were engaged in marginal work.

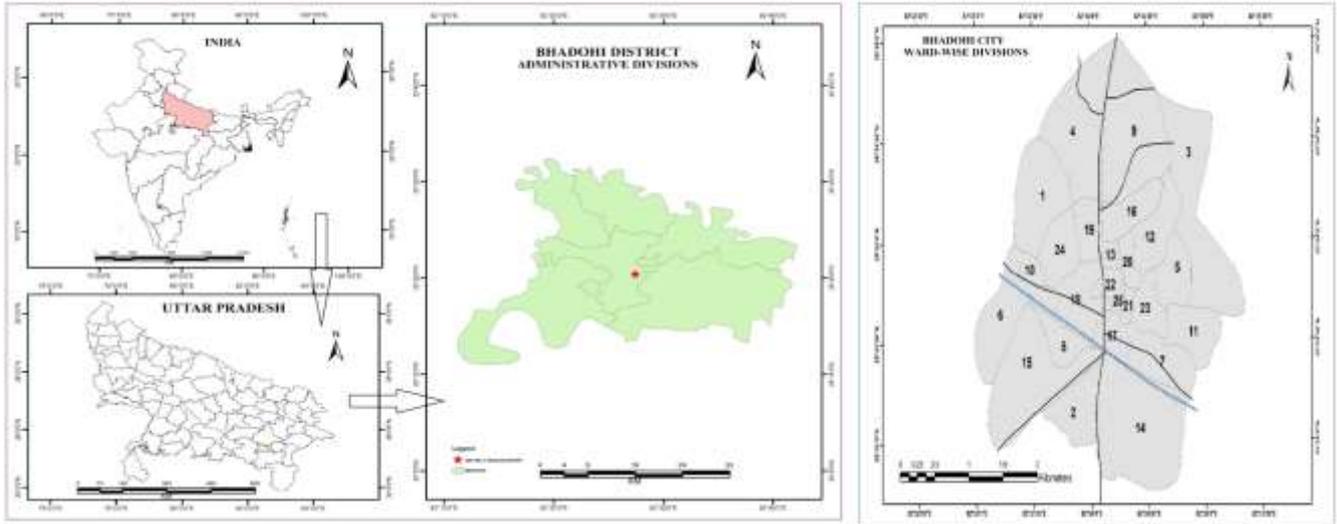


Fig. 1: Location Map of Study Area.

VI. DATABASE AND RESEARCH METHODOLOGY:

The whole study will be based on both primary as well as secondary sources of data. Accordingly, for the primary data, the household survey will be conducted based on a well-structured questionnaire with regard to the objective in mind. For considering field survey among the 25 wards, at least 15 wards have been selected, and for each ward, 25 respondents have been chosen based on random and stratified sampling. A total of 375 respondents have been selected. The ward will be selected on the basis of the following criteria.

- More than 75 per cent of the population is engaged in the carpet industry.
- The maximum number of carpet factory is located in this particular ward.

The secondary sources of data will be collected from Ministry Handloom and Textile Govt. of Uttar Pradesh, Ministry of Textile Govt. of India, Sankhya Patrika Government of Uttar Pradesh, various research papers, Articles, Journals, Newspapers, and books, etc. After collecting the data for showing the result simple percentage method and computer cartography (for showing chart and diagram) have been used. The map of the study area has been prepared from Arc GIS 10.2 Software.

VII. RESULT AND DISCUSSION:

Level of Education	Number of Respondents	Percentage
Illiterate	38	10.13
Primary Education	175	46.67
Secondary	84	22.04
Higher Secondary	33	8.08
Graduation and above	11	2.94
Others	34	9.06
Total	375	100.00

Source: Based on Field Survey, 2018

Table 2: Education Status of Sampled Carpet Workers

Table 2 shows the education status of sampled respondents of carpet workers. It is advocated that 46.67 per

cent of the respondents were studied up to primary education, which is the maximum percentage while they studied graduation and above education is the lowest, which is 2.94 per cent only.

Age Group	Number of Respondents	Percentage
15-25	93	24.08
25-35	177	47.02
35-50	81	21.06
Above 50	24	6.04
Total	375	100.00

Source: Based on Field Survey, 2018

Table 3: Age-Group of Sampled Carpet Workers

Table 3 shows that the age-group of sampled respondents of carpet-making workers depicts that 47.02 per cent of the respondents belong from 25 to 35 age groups, which is the highest percentage. In comparison, the age group above 50 years is the lowest percentage, with only 6.04 per cent.

Religion	Number of Respondents	Percentage
Muslim	244	65.06
Hindu	131	34.94
Total	375	100.00

Source: Based on Field Survey, 2018

Table 4: Religion-wise Population among the sampled Carpet Workers

Table 4 shows that the religion-wise sampled respondents of carpet workers, which advocate that 65.06 per cent of the respondents belonged to the Muslim religion, which is the highest percentage. In contrast, 34.94 per cent of the respondents are the Hindu religion.

Family Size (in Persons)	Number of Respondents	Percentage
Less than 3	43	11.46
3-4	95	25.33
4-5	131	34.94
More than 6	106	28.26
Total	375	100.00

Source: Based on Field Survey, 2018

Table 5: Family Size of Sampled Carpet Workers

Table 5 shows that the family size of sampled carpet workers, which advocates that 34.94 per cent of the respondents have 4-5 family members in their house, which is the maximum percentage. In comparison, only 11.46 per cent of the respondents have less than 3 family members in their family.

Income level (INR Per Month)	Number of Respondents	Percentage
Below 5000	47	12.55
5001-10000	126	33.06
10001-15000	153	40.08
150001-20000	35	9.33
Above 20000	14	3.74
Total	375	100.00

Source: Based on Field Survey, 2018

Table 6: Income level of Sampled Carpet Workers

Table 6 shows that the income level of sampled respondents of carpet making workers, which advocate that 40.08 per cent of the respondents were earning INR 10001-15000 per month, which is the maximum percentage, while the only 3.75 per cent of the respondents are earning above INR 20000 per month which is the lowest percentage.

Reasons	Number of Respondents	Percentage
Unable to meet the household expense	76	20.26
Unable to carry children's Education	134	35.74
Hardly carry health expense	84	22.04
All the above	81	21.06
Total	375	100.00

Source: Based on Field Survey, 2018

Table 7: Problems faced by Sampled Carpet Workers

Table 7 shows that the sampled carpet-making workers' problems, which depict that 35.74 per cent of the respondents, are incapable to meet their children's education expenses due large family size and low income, which is the highest percentage and 21.06 per cent of the respondents were facing the fundamental problems in their daily needs.

Major Diseases	Number of Respondents	Percentage
Cough and Cold (Allergy)	176	46.93
Lungs Problems	42	11.02
Asthma	18	4.08
Rheumatic Problems	46	12.26
Malaria (Dengue)	76	20.26
Tuberculosis (T.B.)	17	4.53
Total	375	100.00

Source: Based on Field Survey, 2018

Table 8: Major diseases faced by Sampled Carpet Workers

Table 8 shows that the major diseases faced by the sampled respondents of the carpet workers which advocate that 46.93 per cent of the respondents are suffered in cough and cold-related diseases due to maximum time engage with the spinning, dying and embossing works and 4.53 per cent respondents are faces Tuberculosis (T.B.) diseases in their working life due to inhale a significant extent of cotton dust,

wool dust and other particles in the manufacturing unit leading to respiratory disorder among the carpet workers.

Minor Diseases	Number of Respondents	Percentage
Backache	124	33.06
Headache	52	13.86
Eye Problems	86	22.93
Problems Pain in Limb and shoulder	41	10.93
Gastric Problems	36	9.06
Stomach Pains	22	5.86
Piles	14	3.73
Total	375	100.00

Source: Based on Field Survey, 2018

Table 9: Minor Diseases faced by Carpet Workers

Table 9 shows that the minor diseases faced by the sampled respondent of carpet workers which depict that 33.06 per cent of the respondents are suffered by Backache problems due to continuous sitting at working place which is the highest percentage, while the 3.73 per cent of the respondents are suffered by piles in their working life.

VIII. MAJOR FINDINGS OF THE STUDY:

The researcher has been pointed out the following significant findings. This are-

- 1) Most of the carpet making workers are working 10-12 hours in daily in the study area, which is very much arduous and monotonous work.
- 2) Most of the carpet workers suffered from major diseases (Cough and Cold, dengue) due to long years of practice of tobacco-related raw materials and minor diseases (Eye problems, backache, headache) due to long hours of continuous sitting at one place.
- 3) Most of the carpets making workers are not getting their wages regularly, so they cannot fulfil the basic needs of life in the study area.

IX. SUGGESTIONS AND POLICY IMPLICATIONS

After going through many aspects related to the socio-economic status and health risk in the study area, the following suggestions have been recommended.

- There should be proper ventilation and lighting facilities available at the workplace. To reduce the exposure of dust, workers should be provided with masks.
- Sanitation facilities like washing, bathing and toilet should be provided, and workers should be motivated to use them.
- There is an urgent need to issue the health care card by the Ministry of Labour and Employment, Government of Uttar Pradesh, to the workers for medical treatment at a subsidized rate in the Government hospital in the study area.
- The Ministry of Labour and Employment, Government of Uttar Pradesh, should provide scholarships, especially to the carpet, making worker's children for educational purposes.
- There should be a regular payment to the rug weaving workers in the study area, which may fall under the All India Carpet Manufacturing Association, Bhadohi.

- The Ministry of Textile, Government of India, should give the Start-up finance to Bhadohi city entrepreneurs for more promotion of this industry, which may help in nation-building.

X. CONCLUSION

Carpet industries played a huge role in the economic development of the country. The carpet-making industry is providing ample employment opportunities in the Bhadohi district of Uttar Pradesh. Many Inter-state and Inter-district peoples rarely migrated for getting their employment in the Bhadohi city. Uttar Pradesh government has launched various welfare schemes to the carpet, making workers bypassing several legislation. Yet, workers have been facing acute problems like disparity in minimum wages and lack of social security. Timely payments are not paid to the carpet; making workers apart from the salaries are not fully paid. Unhealthy work conditions, unsafe drinking water, inadequate health facilities, long hours of working, low income, and poor housing conditions cause several major and minor diseases to the carpet making workers in the study area. The carpet manufacturing unit has the ability to employ the millions of skilled and unskilled worker and becomes the best device of removing the poverty and regional disparities from the country. Let us accept it and prepare ourselves to meet future challenges.

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