

Research Paper :

Carpet weaving industry of Warangal - A field study

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ABSTRACT

An attempt has been made to study the present status of Warangal - a carpet weaving centre. Unlike that of many fields progress in this area has not been marked in steady increment. The main aim of the study was to identify the status of carpet weaving, its set up, functioning and the problems faced by the weavers and reasons for decline in demand for carpets. The study results revealed that the condition of the weavers was pathetic; they were handicapped due to illiteracy, inadequate finance, majority worked for master weavers, inadequate infrastructural facilities and marketing bottlenecks.

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India is one of those countries where people customarily sit on the floor. Carpet weaving in India is a traditional handicraft, passed down from one generation to the next for hundreds of years. Carpet weaving is predominantly a rural based cottage industry, which is mainly export oriented and highly labour intensive. This industry is the backbone of the rural economy in carpet producing areas, which otherwise would largely depend on agriculture as there is less industrialization in these areas. The carpet industry has flourished to include a strong local tinge, while preserving the highly stylized and idealistic Persian standard. The Indian namdah, a kind of felt rug, durries or carpet, is an all-purpose article, indispensable to daily life.

The carpets of Warangal, in Andhra Pradesh have a strong local flavour. Carpet weaving in this southern state is generally rather coarse and loose. Warangal has long been an important carpet-weaving centre. The industry took root when the Mughal army moved into the Deccan carrying it with the camps (Chattopadhyay, 1976). Carpets were bound to thrive in this region, as it was great cotton growing and weaving area. Warangal had been a cultural centre under the old regimes and the soil was ready for any such transplantation. Very soon the Warangal carpet weavers were able to make their mark abroad with their fine work. A very good specimen of this is in South Kensington museum and the story goes that when it was being woven, a change of needle became necessary for

almost each knot, as the patterns were very complicated.

The Warangal weavers have also composed their own designs with some of the old flavour. For instance the Persian Lancelot leaf is here transformed into a flower. Once again the names of patrons passed on to designs in addition to some of their own, like mehbub khani, teerandas khani, hashim khani, dilli khani, thotti khani etc. Carpet weavers are naturally conservative and as long as their patrons remain content with the classical patterns, the weavers prefer to repeat or to further refine earlier models.

The durries and carpets of Warangal are really the pride of the state (Shrilakshmmi and Padma, 2002). They were known for their beauty throughout the world because of their fine weaving and pleasing and harmonious colour combinations. Warangal carpets made great impact on the European markets and had a large share in exports till early twentieth century. But now, Warangal carpets have lost their quality and stability and durries have replaced carpets due to high cost of carpets and lack of demand in the market. In order to study the past and present status of Warangal carpet industry, products, export, problems faced by weavers, reasons for decline etc. this study was taken up.

Selection of locale:

Warangal, a district of Andhra Pradesh was selected for the study. It is a famous carpet weaving centre.

Woolen carpets were much in vogue in the earlier days, but due to the increase in the cost of wool and change in the trend, now the carpets are produced using mainly cotton and jute fibres. The district has an area of 12,846 sq.km. The boundaries of Warangal district are Khammam district in the east, Nalgonda district in the south, Medak district in the west and Karimnagar district in the north. In order to take up the survey, the Assistant Director of Handloom and Handicrafts at Warangal and the staff who were associated with handloom industry were consulted for selection of locale where predominantly carpet weavers reside. Accordingly, the present study was conducted in Kothawada in Hanumakonda Mandal in Warangal district to know the status of carpet industry and to study the problems of the master weavers.

METHODOLOGY

A suitable questionnaire was developed to collect the necessary data from the respondents. The questionnaire consisted of general information, specific questions regarding procurement of raw materials, production and marketing aspects of carpets, and problems of carpet weavers. A comprehensive list of all master weavers and weavers working under them was collected from the office of Asstt. Director of Handloom and Handicrafts in Warangal.

A total of 50 weavers were selected at random from the list following random sampling technique. The interview method was adopted for data collection from the weavers. The method was considered more appropriate tool to be adopted for the study as most of the handloom weavers were illiterates or educated up to Primary School level and generally do not maintain records to give required information. The data collected were coded, tabulated and analyzed statistically in the light of the objectives.

FINDINGS AND DISCUSSION

The findings related to the socio-personal profile of the respondents are presented in Table 1. The findings revealed that majority of the respondents *i.e.* 58 per cent belonged to the age group of 31-40 years, followed by the age group of 21-30 years. Ninety two per cent of the respondents were involved in primary occupation *i.e.*, weaving carpets and majorities *i.e.*, 96 per cent were male respondents. General stores and petty shops were some of the other income generating activities run by weavers.

Regarding educational status it was found that majority *i.e.*, 40 per cent of the respondents were educated up to High School level. Whereas, 16 per cent of the total respondents could not even read and write, only 8 per cent were educated up to Primary School level, 18 per

Table 1 : Socio-personal profile of the respondents (n=50)

Sr. No.	Aspects	Categories	Frequency (N)	Percentage
1.	Age (years)	21-30	14	28.0
		31-40	29	58.0
		41-50	03	6.0
		51-60	04	8.0
2.	Occupation	Primary	46	92.0
		Secondary	04	8.0
		Any other income generating activity	06	12.0
3.	Sex	Male	48	96.0
		Female	02	4.0
4.	Education level	Illiterate	08	16.0
		Primary School	04	8.0
		Middle School	09	18.0
		High School	20	40.0
		Intermediate	06	12.0
		Graduate and above	03	6.0
		Technical education	--	--
5.	Type of family	Nuclear	34	68.0
		Joint	16	32.0
6.	Size of family	Small(< 4 members)	26	52.0
		Medium (4-6members)	20	40.0
		Large (> 6 members)	04	8.0

cent of the respondents could reach up to Middle School level. Very less percentage (6 per cent) were graduates and none of the respondents was technically educated. Majority (68 per cent) of the respondents belonged to nuclear type of families and it was found that size of family was small (up to 4 members) for 52 per cent of the respondents and medium for 40 per cent of the respondents.

The income of weavers reflects their standard of living as well as financial status. Majority of the respondents (54 per cent) earned less than Rs 4000/month and hence belonged to lower income group. Whereas, 40 per cent of the respondents belonged to middle income group and earned from Rs 4000-8000 per month. Only 6 per cent of the respondents belonged to higher income group.

Even with all his/her skills, artistry and all technological developments, the handloom industry in India has been constantly plugged by the twin problems of irregular employment and low wages, leaving the weaver and his dependents in dire distress with hand to mouth existence. Majority of the respondents worked under local manufacturing units, hence their income was limited to the wages paid by local manufacturer for their work. Hence, the income of majority of respondents was low.

Majority of the respondents (58 per cent) were the members of local organizations viz., Cheneta Sahakara Sangha, and dyer's association. Only 14 per cent of the respondents were the members of Co-operative society and 32 per cent of the respondents were not the members of any organization whether private or government. Majority of the respondents (74 per cent) did not own land, only 26 per cent owned very less land and all of them who owned land gave it on lease for cultivation. This might be because the weavers are totally engaged

in weaving activity and hence did not find time for agricultural activities.

The reasons for discontinuing the use of raw materials required earlier are given in Table 2. Majority of the respondents (68 per cent) opined that there was change in the trend of using basic raw materials, whereas 58 per cent of the respondents expressed that there was increase in cost of raw materials used earlier. Forty per cent of the respondents wished to create a new product or bring variety into products hence changed to use of new raw materials. Twelve per cent of the respondents were of the opinion that raw materials were not available in sufficient quantity and 6 per cent answered that there was a problem with dyeing of wool, hence changed the use of raw materials.

The perusal of data in Table 3 reveals that, majority i.e., 80 per cent of the respondents were associated with carpet weaving traditionally as it was their family occupation. Only 20 per cent of the respondents had acquired this skill through training. Majority of the respondents (58 per cent) had spent 11-20 years in this

Table 2 : Reasons for discontinuing the use of raw materials used earlier (n=50)

Sr. No.	Reasons	Frequency (N)	Percentage
1.	Not available	03	6.0
2.	Not available in sufficient quantity	06	12.0
3.	Costlier	29	58.0
4.	Change in trend	34	68.0
5.	Create a new product/new variety	20	40.0
6.	Any other problem	03	6.0

Table 3 : Categorization of respondents based on association with weaving (n=50)

Sr. No.	Aspects	Category	Frequency (N)	Percentage
1.	Association with weaving	Traditional	40	80.0
		Acquired	10	20.0
2.	Number of years spent	1-10 years	14	28.0
		11-20 years	29	58.0
		20-30 years	03	6.0
		30-40 years	04	8.0
		Individually	07	14.0
3.	Mode of working	In a group/association	--	--
		Local manufacturing unit	40	80.0
		Under an organization	03	6.0
4.	Owning looms	Yes	24	48.0
		No	26	52.0
5.	Types of looms used	Pit looms	50	100.0

profession; 28 per cent of the respondents had spent 1-10 years and very less per cent *i.e.*, 6 per cent and 8 per cent had spent 20-30 and 30-40 years in this profession, respectively.

It was also found out from the study that, only 14 per cent of the respondents worked individually, majority of weavers *i.e.*, 80 per cent worked for local manufacturing unit and very few *i.e.*, 6 per cent worked under an organization. Nearly half of the respondents owned looms and all of them used pit looms for carpet making.

Percentage distribution of respondents based on procurement of raw materials is presented in Table 4. Majority of the respondents (70%) procured required raw materials from local manufacturer *i.e.*, under whom they worked. Twenty per cent of the respondents purchased raw materials from other districts like West Godavari district, Vishakapatnam (Rajam, Vijaynagar), Eluru and Secunderabad. Most of the dyes required for dyeing carpet yarns were purchased from Karur, Erode, and Salem in Tamil Nadu.

Majority of the respondents (62 per cent) bought the raw materials on buyback arrangement, 22 per cent of the respondents bought on cash and 16 per cent purchased on credit basis. More than 90 per cent of the respondents opined that they could get required quantity of raw materials. Cotton yarn, jute yarn, synthetic dyes like azo free dyes to dye jute, vat and naphthol dyes to dye cotton, dye fixing oils were the important raw materials required for carpet industry. Cotton yarn was used in the warp as well as for weft for making carpets. Forty four per cent of the respondents purchased the raw materials quarterly, 12 per cent of them purchased monthly

and bimonthly.

Perusal of Table 5 showed that, majority of the respondents were not involved in dyeing at their unit instead purchased the already dyed yarn. Among 44 per cent of respondents who did dyeing at their unit, 36 per cent of them dyed at yarn stage and only 8 per cent of them dyed at fibre stage. It was obvious from the results that, cent per cent of them used synthetic dyes and none of them used natural/ vegetable dyes for dyeing carpet yarns. Majority of the respondents' *i.e.*, 34 per cent did softening of carpet yarns and only 10 per cent of the respondents bleached the yarns. No other treatments were given prior to dyeing.

The results revealed that, 62 per cent of the respondents attended various training programmes on weaving, dyeing and design development conducted by JSC Calcutta, HWCS Ltd., Warangal, Shrikakulam and trainings on natural dyeing at Bangalore and Hyderabad. The period or duration of the trainings was from 3 days to 3 months. Forty six per cent of the respondents attended trainings only once. Whereas, sixteen per cent of the respondents attended the trainings twice.

The observation of the Table 6 revealed that, 88 per cent of the respondents used traditional designs for carpets and 52 per cent used modern designs for carpet making. None of the respondents used computer aided designs. Only 32 per cent of the respondents used their own designs less frequently. Majority of the respondents (82 per cent) used the designs, which were given on order. This might be because when weavers made the carpets based on order, there was no problem in marketing. Whereas, 68 per cent respondents used the designs supplied by the local manufacturer.

Table 4 : Percentage distribution of respondents based on procurement of raw materials (n=50)

Sr. No.	Aspects	Category	Frequency (N)	Percentage
1.	Procurement of raw materials	Local manufacturer	35	70.0
		Local raw material supplier	04	8.0
		From co-operative society	--	--
		Other districts	10	20.0
		Other states	01	2.0
2.	Mode of buying	On credit	08	16.0
		On cash	11	22.0
		Buy back arrangement	31	62.0
3.	Procuring required quantity	Yes	46	92.0
		No	04	8.0
4.	Frequency of purchase	Quarterly	22	44.0
		Monthly	06	12.0
		Bimonthly	06	12.0
		Half yearly	16	32.0

Table 5 : Distribution of respondents based on dyeing practices (n=50)

Sr. No.	Aspects	Category	Frequency (N)	Percentage
1	Type of yarn	Dyed	36	72.0
		Undyed	43	86.0
2	Dyeing	Yes	22	44.0
		No	28	56.0
3	Stage of dyeing	Fibre	04	8.0
		Yarn	18	36.0
		Final product	--	--
4	Type of dyes used	Natural dye	--	--
		Synthetic dye	22	44.0
5	Treatments given before dyeing	Scouring	00	0.0
		Degumming	00	0.0
		Softening	17	34.0
		Bleaching	05	10.0
		Any other	--	--

Table 6 : Distribution of respondents based on designing aspects (n=50)

Sr. No.	Aspects	Category	Frequency (N)	Percentage
1	Motifs and designs used	Traditional	44	88.0
		Modern	26	52.0
		Computer aided designs	--	--
		All the above	--	--
2	Using own designs	Yes	16	32.0
		No	34	68.0
3	Frequency of use	Less frequently	16	32.0
		Frequently	--	--
		Most frequently	--	--
4	Designs provided by	On order	41	82.0
		Local manufacturer	34	68.0
		Wholesale dealer	--	--
		Designers	--	--
		Any other	--	--

More than seventy per cent of the respondents received or got help from their family members. The family members helped the respondents in bobbin winding, making yarn hanks and sometimes in supervising the activities. Whereas, 28 per cent of the respondents did not receive any help from family members. Only forty six per cent of the respondents had employed the workers and 54 per cent did not employ workers. The employed workers helped in procuring raw materials, dyeing, finishing, labeling, edge stitching, and packing and transportation activities.

It is obvious from Table 7 that, for weaving the carpets of any size, two weavers were required on one loom. To weave a plain carpet of size 4 x 6 feet at least three hours were required, and for the designed carpets of the same size, 9 hours *i.e.*, one working day was required. Carpets produced were of 4 x 6 feet to 10 x 20

Table 7 : Time requirement for completion of single carpet of various sizes

Sr. No.	Size of carpet	Simple carpet	Design carpet
1.	4' x 6'	3 hrs	9 hrs (1 day)
2.	4.5' x 6.5'	3 hrs	9 hrs (1 day)
3.	5' x 7'	4 hrs 30 min	13 hrs 30 min
4.	5' x 8'	4 hrs 30 min	13 hrs 30 min
5.	6' x 9'	8 hrs	27 hrs (3 days)
6.	6.5' x 9.5'	8 hrs 30 min	27 hrs (3 days)
7.	8' x 12'	9 hrs (1 day)	36 hrs (4 days)
8.	9' x 12'	13 hrs 30 min(1½ day)	45 hrs (5 days)
9.	9' x 15'	13 hrs 30 min(1½ day)	45 hrs (5 days)
10.	10' x 12'	18 hrs (2 days)	54 hrs (6 days)
11.	10' x 15'	18 hrs (2 days)	54 hrs (6 days)
12.	10' x 20'	27 hrs (3 days)	64 hrs (one week)
13.	4' x 100'	64 hrs (one week)	135 hrs (15 days)

feet in size. The largest sizes of carpets produced were 4 x 100 feet, which were called Janamas. It was noticed from the table that as the size of carpets increased, the time required to weave the carpets also increased. Time required to weave plain and simple carpets was less when compared to designed carpets. The time required to weave carpets of 10 x 12, 10 x 15 and 10 x 20 feet was from 2 days to one week. Whereas, it took 15 days to complete one big carpet i.e. janamas.

The quantity of raw material required for weaving a single carpet of different sizes was calculated and was done based on number of reeds required to weave a particular size of carpet which again depended on the type of yarn that was used in weaving. For cotton x cotton carpets 10 reeds/inch were used. Hence, the warp yarn required was calculated as 20 per cent of the total area (sq.ft) of carpet. Weft yarn requirement was 80 per cent of the total area of carpet. Jute x Jute and Cotton x Jute carpets are generally woven on 7 reeds/inch. Here, the requirement of warp yarn was taken as 18 per cent and weft yarn as 82 per cent of the total carpet area. Whereas for Cotton x Banana carpets 3 ½ reed/inch was used. Here, warp yarn requirement was 15 per cent and weft yarn requirement was 75 per cent of the total carpet area. It is obvious that, as the size of the carpet increased, the quantity of raw material required also increased.

Fourteen per cent of the respondents borrowed capital amount for investment from private money lenders as it was easy and hassle free process. For two per cent of members, the source of working capital was co-operative society. Six per cent of respondents got financial help from commercial banks and the remaining 6 per cent had invested their own money in carpet business. Very

less number of respondents approached commercial banks because the weavers were not much educated. Hence, they were unable to follow the bank procedures.

Majority of the respondents sold the manufactured carpets to private organizations (48 per cent), to individuals (40 per cent) and thirty eight per cent sold in exhibitions. Twenty two per cent of the respondents sold the carpets to Government agencies and shops. Twelve per cent of the respondents sold the carpets in local weekly markets and 8 per cent of the respondents sold to Co-operative societies. All the manufacturers were having their local selling outlets and also sold outside local area. The private organizations and government agencies purchased from local manufacturers and sold to consumers keeping some marginal profit.

Table 8 shows the distribution of respondents on the basis of production activities. It is evident that all the respondents considered different factors such as interest on basic investments, total cost of raw materials, labour charges, and overhead charges while costing or fixing the price for their products. Sixty eight per cent opined that local manufacturer only fixed the price for their products whereas thirty two per cent of them priced their own product.

Cent per cent of the respondents opined that rainy season was the slack season for production of carpets *i.e.*, during the rainy season the production of carpets got affected to maximum. The respondents were using pit looms and during rainy season, the water got collected in the pits and they were unable to work. The production of carpets was more during winter and summer seasons.

Cent per cent respondents reported that, they did not apply any chemical finishes. Once the carpets were

Table 8 Distribution of respondents based on production activities (n=50)

Sr. No.	Aspects	Criteria	Frequency (N)	Percentage
1.	Criteria for pricing the products	Interest on basic investments	16	32.0
		Total cost of raw materials	16	32.0
		Labour charges	16	32.0
		Overhead charges	16	32.0
2.	Involvement in pricing	Self	16	32.0
		Local manufacturer	34	68.0
		Co-operative society	--	--
3.	Slack season	Winter season	--	--
		Summer season	--	--
		Rainy season	50	100.0
4.	Applying finishes	Yes	--	--
		No	50	100.0
5.	Export of carpets	Yes	7	14.0
		No	43	86.0

produced, all the respondents trimmed the protruding threads. Only fourteen per cent of the respondents exported the carpets. Now-a-days local manufacturers took orders and produced carpets as per the order. Once the carpets were ready, buyers' inspection was done, and then carpets were neatly packed and sent to Chennai, Mumbai via shipment. In the shipping yard rechecking and repacking take place and then exported to foreign countries. The local carpet manufacturers had worked on orders from Los Angeles, Baltimore, Chicago, and Mountrain from USA, Hong Kong, Germany, Japan, Argentina, Denmark and Italy.

The problems faced by carpet weavers in their work place are presented in Table 9. More than thirty per cent of the respondents reported that, high price and non-availability of raw materials on time were the major problems experienced at work. Only 8 per cent of the respondents said that adulteration of yarn and non-availability of required quantity of yarn was the problems they faced sometimes.

A majority (80 per cent) of the respondents reported shortage of finance and faced lot of problems in getting finance. Most of them (40 per cent) did not know the procedure for taking loans and others were unwilling to provide securities. More than half of the respondents faced the problem of getting security to take loans. Forty six per cent had no surety to keep for getting loans. More than ninety per cent of the respondents faced the problems in repaying loans. The problem of high interest rates were reported by 82 per cent, followed by insufficiency of income (58 per cent), sudden financial demands from the family (20 per cent) and no freedom to produce the desired

products (12 per cent).

The weavers were facing a lot of difficulties/problems at work. The use of outdated looms (68 per cent) and lack of variety (60 per cent) were the major problems experienced by majority of weavers. Lack of financial assistance was also the major problem experienced by nearly half of the respondents. Lack of skilled workers (18 per cent) and lack of skill in weaving (28 per cent) were some of the problems reported by respondents. Only 8 per cent of the respondents reported that they faced problem with poor quality of yarn and dyes.

Table 10 explains about the marketing problems faced by the respondents. It was surprising to note that none of the weavers working under the middle men and wholesaler, faced the problem of marketing *i.e.*, hike in price, accumulation of stock, problems in selling goods etc as it may be due to the supply of raw material and selling of goods were done by the agency/ local manufacturer under whom they were working.

Difficulty in transportation (36 per cent), high commission of middlemen (22 per cent) and storage problems (32 per cent) were some of the problems faced by the respondents. More than half of respondents opined that there was demand for these carpets in the market and almost 80 per cent of the respondents expressed that the productivity was up to the mark and met the demand in the market. Whereas, 42 per cent opined that demand for carpets had come down in recent years.

The reasons given by the respondents for decline in the demand of carpets are revealed in the study. Majority of the respondents (38 per cent) agreed that use of bright

Table 9 : Distribution of respondents based on problems faced in working (n=50)

Sr. No.	Aspects	Criteria	Frequency (N)	Percentage
1.	Difficulty in procuring raw materials	Non availability of raw materials	--	--
		Non availability on time	16	32.0
		High price	17	34.0
		Adulteration	04	8.0
		Required quantity not available	04	8.0
2.	Difficulty in securing loans and advance money	Yes	40	80.0
		No	10	20.0
3.	Problems in securing loans	Sureties	23	46.0
		Lack of knowledge	20	40.0
		Security	27	54.0
4.	Problems in paying loans	Yes	46	92.0
		No	04	8.0
5.	Specific problems	High interest rates	41	82.0
		Insufficiency of income	29	58.0
		Sudden financial demands	10	20.0
		No freedom to produce desired goods	06	12.0

Table 10 : Distribution of respondents based on marketing problems (n=50)

Sr. No.	Aspects	Criteria	Frequency (N)	Percentage
1	Faced problems in marketing	Yes	19	38.0
		No	31	62.0
2	Problems faced	Difficulty in transportation	18	36.0
		High commission of middlemen	11	22.0
		Storage problem	16	32.0
		Lack of demand	--	--
3	Demand for carpets in market	Yes	29	58.0
		No	21	42.0
4	Productivity is up to mark	Yes	40	80.0
		No	10	20.0

colours was the reason for decline in demand. Sixteen per cent of the respondents opined that high price of carpets reduced the demand. Eight per cent agreed that use of traditional designs, and low quality of production were the reasons for decline in the demand of carpets. Few (6 per cent) respondents opined that lack of variety and design clarity were the reasons for decline of demand of carpets. Consumers rarely purchase carpets and when they purchase expect that it should have very good design with good colour combination, and of good quality raw materials. The weavers did not adopt any new techniques, used the same old designs and colour combinations which were not liked by consumers, hence the decline in the demand of carpets.

More than seventy per cent of the respondents were interested in taking up inventions. Out of which, forty six per cent of the respondents were interested in taking up inventions by using new designs, whereas 38 per cent wanted to use new dyes and try using different kind of raw materials as they were interested in keeping up the

family tradition of weaving and also to create more demand in the market. Twenty per cent opined that it was a non-profitable enterprise, 6 per cent of the respondents were not interested in taking up inventions.

Forty two per cent of the respondents faced some health problems out of which majority (34 per cent) reported back pain followed by dust allergy in working area (32 per cent). Twenty four per cent reported cough, eyesight problem mainly for aged respondents (14 per cent) and breathing problems (10 per cent). These problems mainly back pain might be due to long hours of weaving by sitting in one place; cough may be due to inhalation of the smell of the dyes and chemicals used for dyeing and dust allergy due to unhygienic conditions in the working area (Gupta, 1991).

Conclusion:

The weavers are facing various problems related to procurement of raw materials, finance, health, working conditions, marketing etc. which are affecting their general well being. Keeping this in mind, various

**Fig. 1 : Carpet weaving at Warangal****Fig. 2 : Dyeing of carpet yarns at Warangal**

measures must be undertaken in order to improve present working conditions of the carpet weavers in order to increase the production of good quality carpets. The weavers must be given training regarding the latest techniques of carpet designing, weaving and technologies for upgradation of their units. The government and other allied agencies should come forward with some package of assistance to strengthen this sector as it will help to improve the condition of weavers and preserve the rich heritage of carpet weaving.

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REFERENCES

- Chattopadhyay, Kamaladevi** (1976). *Carpet and floor coverings*, The Glory of Indian Handicrafts, Clarion Borks, New Delhi, pp. 63-75.
- Gupta, Raja Ram** (1991). Problems and prospects of Indian carpet industry, *Indian Textile J.*, **101**(6) : 18-23.
- Shrilakshmi, B.** and Padma, A. (2002). Study on durries and carpets of Warangal, *Textile Industry & Trade J.*, 49-51.

