

## LARGEST AMONG THE ERSTWHILE HAND PROCESSING CLUSTERS,

### THE PALI - MARWAR

Pali is the largest erstwhile hand processing cluster, now gradually moving to power processing machines, after rationalisation of excise duty in the year 2004 - 05. It produces bleached, dyed and printed fabrics from as low as Rs.4.00 per meter cost to dyed rubia of as high as Rs.40 per meter. There are units at Pali which are producing over 1000 Assortment shades. Many Pali processors operate their own looms at Bhiwandi for captive consumption at Pali. Economy of Pali depends much on its Processing activities. The town is busted with processing activities and coloured fabrics moving from one place to other. It is a great place, which everyone having interest in processing, must visit and see how a high risk processing industry is surviving and flourishing without much of technical and scientific input. It could do wonders if these inputs are made available to it.

#### 1. Historical background :

Pali-Marwar, commonly known as Pali, falls under Pali district of Rajasthan State. Pali is 32<sup>nd</sup> district of Rajasthan. Before formation of Rajasthan, it was a part of Jodhpur State. Pali town is the district headquarters of Pali district. District Pali shares common border with eight districts viz. Nagaur, Jodhpur, Udaipur, Rajsamand, Ajmer, Barmer, Sirohi and Jalore. Pali was once known for weaving of coarse cotton and woollen cloth made mainly from

locally produced fibres, and for dyeing and printing of cotton fabrics. Pali prints were known well beyond the boundaries of Marwar state. Dyeing and printing of fabrics constituted a highly specialised industry and thrived in consequence of it's ability to gratify the love of colours or rather well designed combination of colours which were very popular in Rajputana. Turbans for men and scarves for women were dyed and prepared with much hard work by "chandwas" and "khatries" and embroidered silk knitted twines for wearing on turbans, were prepared by "Patwas" (Pat means silk).

#### CRAFT THREADWORK -PATWAS



Textile bleaching, dyeing, printing and processing industry has come up at Pali due to availability of a large number of chhipas (Printing community) and skilled dyers (Rangrej).

## 2. Location :

Pali town is about 70 kms from Jodhpur. It is connected to Jodhpur by train and road route. Marwar Jn is the nearest railway station on main train route. Jodhpur is directly connected to Delhi by train route. Pali is also connected to Udaipur by road or by train via Marwar Jn railway station.

### PALI LOCATION MAP



### 3. Industrial profile :

Textile processing units at Pali Marwar are located at Mandia Road industrial area, Phase I and II industrial area, Ramdeo Road, Gandhinagar, Sumerpur road and Bajrangwadi as under :

S.No.	Location	No. of units
1.	Mandia Road Indl Area	473
2.	Phase I & II Indl. Area	121
3.	Units situated at main Mandia Road, Talab Ki Pal, Gandhi Nagar, Ramdeo Road & Residential area of Pali town	170
4.	Sumerpur Road, Bajrangwadi, Ramleela Maidan, Mandi Khurd, Sojat Road, Indira colony, Village Mandia.	95
5.	Composite unit viz Maharaja Shree Umaid Mills Ltd., Pali Marwar, Rajasthan	1
	Total	860

Production of fabric - 1330 Mn metres (Approx.)  
Annual turnover - Rs.2000 crore (Approx.)  
Employment - Around 35000 - Direct and  
1.5 lakh - Indirect

Whole economy of Pali depends on its Processing and other small scale industrial activities.

Out of 860 units mentioned above, printing units are around 500, Stentering units 42, saree processing units 42 and rest dyeing, bleaching and processing units for mixed

varieties. There are around 800 printing tables, about 100 flat bed printing machines and around 4000 jiggers. Smaller units have got hand operated and motor operated locally fabricated machinery and equipments while larger units have installed medium technology machines like Semi automatic to computerised automatic flat bed printing machines, U type Jet dyeing machines, Loop agers, Winch washing, Jumbo jiggers, Felt - calendering, 4 to 5 chambers closed stenters etc. By replacing semi automatic flat bed printing machines with automatic ones, entrepreneurs have been able to reduce workers from 15 to just 4. There are units that have been able to get pay back of Rs.30 lakh worth computerised flat bed printing machines within one year. There is no dearth of job work and some of the units have got advance job orders. Majority of the products are for low priced domestic and export market. Direct export activities are less and most of the export is through merchant exporters.

Some of the entrepreneurs of Pali have set up their own looms at various Powerloom clusters for their captive consumption at Pali. This helps them in cutting cost and better control on quality of fabric. This also saves them from the unfair practices adopted by some weavers undertaking job work of weaving of fabric. Most common of such unfair practices includes using less yarn than given and reducing reed and pick etc to increase their margins. For better control on production, quality and delivery, they have set up their office at Bhiwandi or in Mumbai suburbs, buy yarn, get it texturised (if necessary), produce fabric on their own looms at Bhiwandi, send such fabric to Pali for processing and arrange its marketing at Mumbai or other markets.

Rajasthan Electricity Board, Water works Department, RIICO, Directorate of Industries, Rajasthan State Pollution Control Board, Rajasthan State Financial Corporation and various banks are giving their all out support for development of Pali processing cluster. Various associations that are active in pushing up the issues of interests of Pali Textile Processors are :-

- i) Rajasthan Textile Hand Processors Association
- ii) Rajasthan Textile Processors Association
- iii) Felt Association
- iv) Dyeing units Association
- v) Curing units Association

#### 4. Product profile :

Product profile includes immense varieties. A few common varieties are :-

S.No.	Product	Specifications	Price range
1.	100% cotton Plain Voile (odhani)	Count 70s x 90s 80s x 100s 100s x 120s Reed x Pick 64 x 64 to 96 x 112	Rs.7.50 to 27 per meter
2.	100% cotton Plain Voil (Lining cloth from Malegaon)	Count 40s x 60s 60s x 60s Reed x Pick 36 x 36 to 48 x 56	Rs.8 to 9 per mete
3.	100% cotton Surgical cloth	-	Rs.4 to 8.50 per meter
4.	100% cotton 2 x 1 and 2 x 2 Plain & dyed Rubia (For lady blouses)	Counts 55s x 120s 120s x 120s (High twist) Reed x Pick 68 x 68 to 72 x 72	Rs.5 to 40 per mete
5.	100% Poplin	Count 34s x 34s Reed x Pick 52 x 48 to	Rs.9 to 13 per meter

		80 x 52	
6.	100% cotton Khanga and Kitanga (African Dress Material)	Count 34s x 34s 30s x 30s 40s x 40s Reed x Pick 54 x 54 to 80 x 72 70 x 180 gsm	Rs.10 to 40 per meter
7.	Light weight 100% cotton Pagri (used in marriages in Maharashtra)	-	Rs.4.00 per meter
8.	100% cotton Dress material	Count 40s x 40s 40s x 60s Reed x Pick 64 x 64 84 x 76	Rs.4.50 to 20 per meter
9.	100% cotton printed sarees	-	Rs.90 - 100 per saree
10.	100% Polyester printed sarees and dress material	-	Rs.80 - 90 per saree Dress material Rs. 15 to 25 per meter

**Pali processing units process thousands of varieties ranging from Rs.4.00 per meter to Rs.40 per meter. Varieties other than mentioned above include Tie & Dye scarves, Roomalis (small lungi type product used by Koli community of Maharashtra), printed odhanis (1.75 meters) for Arab communities, sarees ranging from 4.50 meters length used in interior villages of U. P. and Bihar to**

**PRINTED ODHANI**



9 - 10 metres sarees used in Maharashtra, muslin fabric, flags of various countries, election banners and other material and various customised products depending on demand. There are units producing over 1000 shades of rubia and Poplin for blouses and petticoats.

Dyes used are mainly reactives and disperse, while Napthols, vats. Pigments are also used. Discharge printing is also practiced.

Job charges range from 50 paise to Rs.1.50 for bleaching, Re1.00 to 4 per meter for dyeing and Rs.5 to 8 per meter for printing. Customary finishing involves starching and softening. Many units are coal and firewood based. Coal supply is from Nagaur and Barmer, Kutch (Gujrat) mines.

**5. Environmental responsiveness :**

**5.1 Various Common Effluent Treatment Plants :**

Pali has been pioneer in its environmental responsiveness, having installed a common effluent treatment plant as back as in 1983. Details of various CETP units at Pali are given below :-

S. No .	CETP Location	Project cost (Rs.)	Date of commissioning and Project undertaken by	Capacity	Member units location
1.	Unit - 1 Mandia Road Campus	38 lakh	23.02.1983 RIICO Pali	5200 cubic meter per day (1.15 MGD)	Mandia Road Indl Area, Bapu Nagar, Sumerpur Road, Bजारंगवाडी, Municipal Waste Water, Ramlila Maidan etc.



2.	Unit - 2 Mandia Road Campus	9.70 Crore for Unit No.2 & 3	22.05.1997 Trust of units	8400 cubic meter per day (1.85 MGD)	Mandia Road Indl Area, Bapu Nagar, Sumerpur Road, Bajarangwadi, Municipal Waste Water, Ramlila Maidan etc.
3.	Unit - 3 Punayata Road Campus		12.01.1999 Trust of units	9080 cubic meter per day (2.00 MGD)	Municipal waste water, Phase I & II Indl. Area, Maharaja Shree Umaid Mills Ltd., Mahaveer Udhyog Nagar, units of city area

### EFFLUENT TREATMENT PLANT



#### 5.2 Pali Water pollution control, Treatment and Research foundation Trust :

Pali is an unique case to show as to how a common effluent treatment plant can be run efficiently and collectively without much of hassle. A trust, namely, Pali water Pollution control, Treatment and Research Foundation Trust, having it's office at Mandia Road CETP premises works under the

Chairmanship of District Collector Pali, with local M.P., MLA, Chairman Municipal Council, Regional Officer RIICO, GM-DIC, Executive Engineer, Commissioner Municipality, ADM, SDM Pali and representatives of various associations as other trustees.

### 5.3 Financial Resources for operation and maintenance of CETPs at Pali :

Financial requirement to operate the CETPs are met through cess collected on the basis of cloth brought for processing. A notification was issued by the State Govt. in August 1989, authorising Pali Municipality to collect the cess @ Rs.15 per quintal of cloth. This was revised subsequently to Rs.25 per quintal. Another revision in rate of cess to Rs.50/- per quintal w.e.f. 12.2.2001 was done by the State Govt. under "Pradushan Janya Vyavsay Kar Act 2001" whereby Municipality has been authorised to retain 15% of the cess and balance to be transferred to Trust. Trust receives over Rs.30 lakh under this head to manage its' day to day expenses. It is financially sound having funds over Rs.5 crore. In terms of a further resolution passed by the Trust in the year 2004, the cess rate has been further revised from Rs.50 to 75/- per quintal for cotton fabric and Rs.50/- to 100/- per quintal for synthetics, to meet the increasing expenses to run and operate various CETPs.

#### 5.4 Expansion and upgradation of CETPs under Textile Centres Infrastructure Development Scheme (TCIDS) of Govt. of India, Ministry of Textiles :

It was found later on that the existing CETPs were not capable of meeting requirement of the industry since those were designed for the parameters related to processing of cotton fabrics, and the industry gradually adopted processing mixed sorts comprising cotton, synthetic and blends. Further, environmental awareness among the public and directions of Judiciary and State Pollution Control Board have made it necessary to shift the processing units within Pali city to outskirts and also dispose of the generated sludge safely into landfills. As a result, a project at the cost of Rs.19.90 crore financed under TCIDS has been undertaken to upgrade CETPs unit no.1 and 2 at Mandia Road campus and unit no.3 at Punayata Road having capacity to treat 5200, 8400 and 9080 cubic metre effluents per day respectively to 17000 cubic meter for unit 1 and 2 and 12000 cubic meter for unit no.3. The TCIDS project also provides for construction of a new CETP of 9000 cubic metre capacity to take care of effluents of 270 units to be shifted out of city, construction of Nallah for conveying the effluents of Phase I and II industrial area from Subhash Nagar 'B' syphon to CETP Punayata Road (CETP unit no.3) and Secured landfills for safe disposal of sludge generated by various units.

## 6. Problems and Suggestions

### 6.1 Water Problem :

Processing of textiles requires plenty of process quality water. An average sized unit spends around Rs.10 lakh an year for water alone. In industrial area there is practically no water supply through tube wells or open wells. Units are managing water from about 30 kms beyond the circumference of Pali. Industry suggests that Govt. may endeavour to solve this problem by earmarking industry's share in Jawai dam or undertaking a project to bring water from Indira canal from Jodhpur. Industry has expressed its opinion to share financial contribution to meet their water requirement.

### 6.2 Creation of weaving facilities at Pali itself :

Pali Processors operate more than 10000 looms at Bhiwandi cluster alone, for their captive consumption. Conducive atmosphere like tax exemption, reduction in power tariff etc. could provide a great scope for development of a Textile weaving park at Pali itself to meet the requirement of Pali Processors. This would not only save on transportation cost, consumption of precious fuel in such transportation and consequent environmental pollution due to burning of fuel etc but would also save on other overheads of maintaining infrastructure of office and manpower to monitor the production, quality and delivery from Bhiwandi to Pali. This

would also help in boosting of employment and economy of Pali city.

### 6.3 Arrangement for Piped gas supply :

Whole cluster works on firewood and coal, with a few units using natural gas for heating. Carbon particles released from coal and wood not only affect the health of workers and population of Pali city but also deteriorates the quality of fabric. Cluster produces goods worth Rs.1330 million. There is a great scope for pipeline gas supply to improve quality, productivity, economy and eco friendly processing.

### 6.4 Technology Upgradation :

Pali products belong to low priced segments. Average products are in the range of Rs.4.00 to 15 per meter, with a few varieties like Rubia and export varieties costing little higher. Forward looking entrepreneurs are moving to better technology machines but overall picture is still a low end primitive technology, producing cheaper varieties. Technology upgradation to move to higher segment of domestic and export market is must. This would not only improve the image of Pali from a cluster of low value processing to high value items but would also increase the profit margins and economy of city. Technology Upgradation Fund Scheme of Govt. of India, Ministry

of Textiles offering interest subsidy and capital subsidy for specified machines is the best available financial cushion for this purpose.

#### 6.5 Technically qualified and trained manpower :

There is an overall financial soundness in the processing industry of Pali but the awareness of technical and scientific input by employing technically qualified personnels is missing. Least attention is paid to employment of skilled workforce and their training. Processing activity is high margin but high risk activity and requires both skilled manpower and latest technology. Local ITI and college may be roped in to meet the local demand of technically qualified and trained personnels for the industry by setting up a separate textile Deptt. in ITI.

Prepared by Ram Asrey Lal, Dy Director (Chemical Processing), under the guidance of the Textile Commissioner, Mumbai and material based on :

- i) Discussion with Shri Mangilal Gandhi, former Chairman, Pali Municipality, President Rajasthan Textile Hand Processors Association and a grassroot successful entrepreneur & Direct exporter.
- ii) TCIDS project submitted for expansion and upgradation of Common Effluent Treatment Plants.

