Indian craft tradition, an integral part of Indian life is one of the most vibrant and vital aspect of contemporary times to the extent that crafts has become the inseparable parts of its social fiber. However, in view of newer technologies and considering the ever-changing contours of market preferences, there is an imperative need to preserve these ancient legacies lest they should get ruined. Many of traditional crafts are languishing and along with these, is indigenous knowledge of some of the traditional textile techniques. One such craft is alizarin dyed double *ikat* telia rumal of Andhra Pradesh, which is genesis to *ikat* tradition in Andhra Pradesh. In India, Andhra Pradesh, is the most prolific producer of *ikat* textiles, where in Pochampalli, the *ikat* industry has grown immensely in the last four decades. But in this era of rapid industrialization, it has succumbed to pressure in favor of using quicker dyeing procedures by use of synthetic dye material and thus, is losing its individuality. There has been a global concern regarding use of eco-friendly dyeing material, which has renewed interest towards use of eco-friendly dyes. The present paper focuses on the documentation of the double *ikat* telia rumal using natural *alizarin* dyeing process, with respect to design, raw material, and production processes. The instant paper also examines contours of the *ikat* production process from its pure form, to more market-oriented production and to highlight the changes that the craft has undergone for contemporary production practices.

**Keywords:** Telia rumal, *ikat*, Alizarin dyeing, Mordant

**IPC Int. Cl.**: D0, D03, D05

Since time immemorial, India enjoys profusion of creative energies for production of textiles. Weavers, dyers, embroiders and spinners contribute the indigenous and varied handmade textiles\(^1\). Amongst which the magnificent *ikat* textiles command a very special status. Rouffaer is credited with introducing term *ikat* in European language but it drives its origin from Malay-Indonesian word ‘Mang *ikat*’, meaning to bind or knot\(^2\). *Ikat* refers to tie and dye of yarn prior to weaving which results in selected dye penetration, creating motifs with different colors, once woven. There are three styles of *Ikat*, Single *Ikat* where resisting of warp or weft yarns is done for dye penetration; *Combined Ikat*, where both warp and weft yarn resist co-exists in same fabric and *Double Ikat*, where both warp and weft threads are resisted to produce unique patterns after weaving and it requires high precision and skill\(^3\).

The *Ikat* process varies in certain details throughout the expanse of the world wherever it is practiced, though single *ikat* is more popular. India enjoys the peculiar distinction of carrying on with *double ikat* even in the contemporary times, Japan in Pacific and Indonesia in South-east Asia being the only other two such places all over the globe\(^3\).

The earliest evidence of *ikat* textiles in India is found in the wall-paintings at Ajanta in the Deccan, dating from the fifth to seventh century. The Deccan *ikat* tradition extended South-eastwards to coastal Andhra Pradesh and Orissa, where it evolved during the twentieth century. At present, *ikat* technique in India is commonly practiced in 3 regions, viz. in Gujarat, it is known as Patola, Bandha in Orissa and Pagdu Bandhu, Buddhavasi and Chitki in Andhra Pradesh\(^3\).

However, Andhra Pradesh is today the most prolific producer of *ikat* textiles in India, in modern times known for the colorful *saris* and yardage produced in the villages of Nalgonda district, near Hyderabad, of which the best known is Pochampalli. Andhra Pradesh does, however have a much older local tradition of cotton *double ikat*-weave of *telia rumal*, distinct from the market-led one and which undoubtedly, formed the basis of that industry. As per historical records, origin of *telia* weaving is mentioned only as late as nineteenth century, where Chirala seems to have been the earliest and primary centre for *telia*...
production in Andhra Pradesh. Chirala developed its own Ikat style with a fascinating double Ikat telia rumal. Telia Rumal is taken from the words tel meaning oil, relating to the natural alizarin dye process, requiring an extensive oil treatment and rumal meaning square or kerchief, relating to the 1 m sq of fine cotton. The original meaning of rumal in Persian is ‘face-wiping’ and refers to a local use as a ritual cloth with which Hindu images were cleaned, as well as to the everyday use. In the first half of the twentieth century, manufacture of telia rumal expanded, from local markets to export markets where they were valued for their oil-treatment, rendered due to alizarin dyes as it keeps the head cool, ward off dust and softens, with every wash. Thousands of cloths were exported under the trade mark ‘Asia-Rumal’ to the Middle East, to countries in the Persian Gulf, to Aden and further on to East Africa. To meet higher export demands, practitioners from Chirala trained weavers from Nalgonda in rumal-production for increased output. However, slowly after Independence, these secondary centres developed into flourishing centres of telia rumal production.

The innate beauty of historical and contemporary telia rumal illustrates how traditional method of hand weaving evolved and matured, with limited means of resources and has been passed on over the generations. Change being the only static law of nature is surely bound to impact, though in different yet unknown ways, even the telia rumal, an embodiment of the finest double Ikat textile. Considering the inevitability of this ever-going process, owing to plethora of factors, inter alia, influences of current market scenario and contemporary life style, detailed documentation of the existing craft, is required for preservation of its essence and an attempt for its revival as a sustainable craft practice. The main emphasis of this study was to document the magnificent double Ikat telia rumal using natural alizarin dyeing process, with respect to design, raw material, and production processes and to examines contours of the Ikat production process from its pure form, to more market-oriented production as also highlight the changes that the craft has undergone for contemporary production practices.

Methodology

To obtain the formulated objective, detailed study was conducted. Field study was carried out during 2010-2015 at the selected villages (2 Nos.), namely Pochampalli and Puttapaka, in Nalgonda district of Telangana. The study was conducted after seeking the prior approval of weavers. The tools selected for data collection included a semi-structured interview-schedule and observation method as it provides more scope for cross-questioning or re-wording of questions, to obtain relevant and complete information. Towards this, many visits were planned and photo documentation was done. Through purposive and snowball sampling methods, total sample of 22 weavers was selected, who still carry out this craft in traditional manner. Efforts were made to cover all aspects of operations involved in Ikat weaving. The questions dealt with demographic details, history of craft, processing of yarns, pre- and post-loom processes, weaving, design, training and marketing questions were also included to know about the problems faced and their aspirations for the future generations as also their craft. Master weavers and scholars related to this craft were also interviewed. Though majority of weavers were in age group of 30-50 yrs, yet weavers in age group of 50 and above, have more accurate information regarding the traditional practices.

Results

The data gathered from primary and secondary sources is compiled and presented as below:

(a) Documentation of craft

During visit to Chirala, an astonishing fact came into light that this craft is no more practiced in Chirala, which is said to be cradle for telia rumal, it is already extinct there and most of weavers were not even aware of its nuances. Telia rumal is now only woven around in Nalgonda district, in villages of Pochampalli and Puttapaka.

All the respondents belonged to the traditional weaver community namely Padmasalis and Devangas who have attained, over the generations, a high degree of skill in weaving double Ikat fabrics. For most of the respondents, weaving was primary occupation but a few, practiced agriculture and in lean period, do weaving too. Both male and female were actively involved in pre-processing, dyeing and loom preparation but weaving was mainly done by male member of the family. Most of the weavers were doing commission or job-work for master weaver or middlemen, as they were not able to source the raw material or sell their products themselves as there was no or very less local demand. Though the craft is unique but due to various reasons, its demand is diminishing
with negligible returns and is not able to withstand the production levels of new synthetic dyed-rumals and therefore, weavers are looking for other options and this craft is languishing.

(b) **Tools and Equipments**
All the respondents worked on a Fly shuttle pit-looms, called *Maggan*, made of teak wood, almost all the looms were more than 25 yrs old. But there were no power-looms in use, for *teliya* production.

(c) **Dyes**
Ingredient for red dye–Alizarin and Alum
Ingredient for black–Alizarin and *Earakasu*

(d) **Dyeing of Telia rumal**
*Natural alizarin* dyeing is a mordant style of dyeing and used to produce traditional red and black colour in *teliya* which requires pre-treatment of yarn. It takes 15-16 days before yarn is ready for dyeing.

(e) **Pre-treatment of yarn**
The yarn is steeped for 24 hrs in the solution prepared with sheep/cow dung (Fig. 1a). Then, foreign matter is removed by twitching the yarn. Apart, castor-seed shells are burnt to get ash which is further mixed with gingerly oil, to get thick solution (Figs. 1b,c). The yarn treated with dung solution, is now soaked in the above solution in small quantities and worked for about 15 min, squeezed and sundried (Fig. 1d). Thereafter, the whole process is repeated, in sun, for 16 days, before washing and drying. Now, the yarn is ready for preparation of warp and weft. This process makes the yarn completely saturated and soft. The castor seed pod-ash contains alumina which ensures richer, deeper and intense red colour, when dyed with alizarin. This yarn develops a peculiar oily-smell due to use of oil in yarn treatment which leads to terming of this square rumals as *teliya* rumal.

**Ikat process**
Double-**Ikat** technique is adopted for manufacturing *teliya rumal*. As *teliya rumal* are based on geometric patterns following grid-system, its design is first worked on graph paper while working out details including number of threads and colour scheme as per motif (Fig. 2a). Marking on warp and weft yarn is done on the frames which are based on number of repeat patterns. Accordingly warp and weft yarns are grouped and then folded, before tying proceeds (Figs. 2,b-d). Tying with cotton or rubber strings for resisting the area is done (Fig. 2e). Tied yarn is then dyed in a dye-bath prepared with Alum (used as mordant) and Alizarin, in equal quantities for 2-3 hrs at 60 °C, steeped for 12 hrs, so as to get red colour. The yarn is then squeezed uniformly, washed next day and dried. Likewise, the yarn is again tied with rubber strips as per design and treated in solution prepared with Alizarin and *Earakasu*, in equal quantities for 2 hrs at 60 °C, to get black colour. The yarn is then squeezed uniformly, washed and dried (Figs. 2, f-h). The tied colour warp is then dressed on a Fly shuttle pit loom (Fig. 2i). Once warp is set on the loom, and plain heading is woven, design unit intersections are marked to create guide for tying weft. The weft is wound out on a semi-circular frame called *asulu*, with a cone. The number of threads on frame is based on the length of weft, to be produced. The guide string is attached from the central peg to the outer rim and used while marking the threads to ensure accurate placement of ties (Fig. 2j). Then dyeing is carried out as for the warp. After washing and drying (Fig. 2k) the weft is wound out on cylinders and then on to bobbins for the weaving shuttles. The tie and dye yarn is interlaced with warp according to the plan, to get the original design on fabric as planned on graph (Fig. 2l).

(g) **Colours**
The traditional *teliya rumal* is restricted to 3 colours, viz. red (anything from crimson to orange red, brown red and maroonish red), natural colour and black (black or brown), sometimes with a hint of yellow to orange or pink. If the patterned centre-

Figs. 1 (a-d)- Pre-treatment of yarn (Mordanting); (a)-Sheep dung slurry; (b)-Castor pod; (c)-Ash + gingerly oil; (d)- Yarn is worked
field is predominantly dark, i.e., black or brown, then the plain outer border will be red. If the centre-field is predominantly red, the outer border will be dark. These plain borders have delicate white lines which cross at the corners of the kerchief, to form a fine grid which is created by the *Ikat* process.

(f) **Patterns**

The patterns in the *telia rumal* consist of a variety of multiple images, based around the sub-divisions of a square. These include the dot, square, cross, chevron, rectangle and various stepping motifs. Initial patterns were strictly geometric but *telia rumals* made after 1930s incorporated figurative designs such as lions, elephants, birds, even clock and aero planes, which required higher weaving skills.

**Discussion**

The present *ikat* production at Andhra Pradesh is very different when compared to old samples of traditional *double ikat telia rumals*. Many changes have taken place over the time as in the choice of raw materials, with regard to special devices used for preparing, grouping and wrapping weft and wrap threads and so, in the dyeing process. *Chirala telia rumals* used coarser cotton which was sourced locally and produced for local consumers, available at low

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Figs. 2(a-l)- Warp preparation; (a)-Design graph; (b)-*Telia rumal*; (c)- Grouping of warp threads as per repeat; (d) -Folded one *rumal* length; (e) -Tying of warp threads; (f)-Grinding alum & Alizarin weighted; (g)- Dyeing of warp yarn; (h) -Untying of warp; 2(i)- Setting of warp; (j)- Weft preparation; (k)- Dyed weft; (l)-*Telia* weaving
cost. Motifs were geometric and intricate. Dyes used were natural alizarin dyes which had lengthy dyeing procedure rendering rumal the desirable properties of cooling, dust resistance and softening because of oil treatment given during dyeing process.

The passage of time has introduced certain changes in production of double ikattelia. The major processing of telia, requires skilled hands and indigenous knowledge of the process and no machine can substitute that, but certain implements introduced over the time has expedited the process. Warp sets used by the Warping mills nowadays, for warping and grouping, has made the tedious job quicker and easier. Newly developed semi-circular frames are being used for wrapping, unwrapping and reeling ikat weft yarn so did improved fly shuttle pit-loom, with higher output, keep on the momentum. Moreover, modern wrapping materials such as rubber bands and plastic strips, etc., made Pochampalli as India’s versatile ikat producer. In context to colour and pattern, red, black and white are synonym to telia rumal, though as per study conducted, there has been preference to other natural colours, especially indigo in the colour vocabulary of telia. As regards pattern, there has been demand for more bolder and simplified motifs which goes well with global appeal; though the major decision on patterns are now mainly based on orders received.

Many telia weavers are now looking for easy and quicker options as the process involved in telia weaving is elaborate and time-consuming, with negligible returns. Moreover, they have no support or incentive even from the Government sector to continue with this languishing craft which has negligible market demand.

As per opinions received by master craftsmen and people in telia trade, several aspects need to be looked upon. In this era of modernity and innovation, we are losing the basic essence of traditional telia weaving practices which is reflection of art and culture of native people. We are looking for simple and quicker solutions. There has been paradigm shift from double ikat weaving to single ikat and slowly, the craft of double ikattelia weaving of Andhra is getting fast extinct. The old alizarin dyeing is being replaced by synthetic dyes which tend to decrease the dyeing time besides resulting in quicker and higher production rate but it is not a sustainable solution and this craft is likely to fade away with passing time.

Traditional significance of study and recommendations

Need was felt to undertake research work and scientific documentation of the languishing traditional craft of double ikat telia rumal using natural alizarin dyeing process, as it will help in creating awareness amongst different textile communities and consumers; thus and only thus, will the traditional knowledge be preserved. Telia weaving is not known to many since it originated as a craft for commoner and had never received any royal patronage or special attention during its course of journey. Moreover, it is a sustainable and ecofriendly craft and has lot of growth-potential; if tapped well, it will contribute to environmental sustainability which is need of the hour.

The handloom industry has lot of significance in the economy of our country as it provides livelihood to the large craftsmen population. As such, it underlines the imperative need on the part of the Central and State Governments to devise ways and means, both long term as well as short term, to help identify, preserve, nurture and grow the otherwise getting-extinct traditional Indian arts and crafts, telia rumal being one such craft. Tracking through the historical journey in the contemporary times, marketing becomes the key to the much-needed telia rumal’s turn around, especially by dovetailing internationally-recognized eco-friendly dyes. Considering the peculiar socio-economic parameters of its weaver community, double ikat telia rumals shall do well if there is long-term and coherent policy in place to address their educational, occupational and financial requirements in a comprehensive manner, while providing for marketing-linkages for its local, domestic and export potential. As it is, there are Government schemes under Development Commissioners (Handlooms and Handicrafts), meant for them.

Conclusion

Double Ikat telia rumal’s craft form, having emerged from socio-religious milieu of the State in the past and till date, continues to be so. Telia weaving which is still practiced at a very small scale in Pochampalli and Puttapaka villages of the erstwhile undivided Andhra Pradesh, is true to the concept of traditional methods, with few innovations in terms of materials and tools used, keeping the original form chaste, intact and unadulterated. Traditionally, low count, i.e., 20s and 40s of cotton yarn only was used for weaving telia rumals, but at present, there is demand for finer counts of cotton yarn, even upto 120s, along with silk yarn, which has added different texture to the contemporary telia rumals, targeted for urban consumers as local demand has substantially
declined. The uniqueness of this dyeing and weaving cluster is their self-reliance on raw material, processing material and production which needs to be preserved and is the solution, present day world is looking up to, to protect our environment. During the course of journey from Chirala to Pochampalli, these rumals are losing its uniqueness, i.e., its cooling property, obtained by using natural dye stuff which made it worldwide famous. Use of natural and sustainable dyeing procedure, being need of the hour, requires our immediate attention, to revive the old methods of dyeing with better yarn quality, varied textures and design-vocabulary as also market intelligence.

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