Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 7, Issue, 09, pp.20866-20872, September, 2015

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

ISSN: 0975-833X

RESEARCH ARTICLE

AN OVERVIEW IN TO THE TRADITIONAL TURNED WOOD LACQUER CRAFT OF BUDHNI OF MADHYA PRADESH AND ITS CHALLENGES

[1,*]Soumik Halder and [2]Debojyoti Ganguly

[1]Department of Accessory Design, National Institute of Fashion Technology, Bhopal - 462016, India
[2]Department of Textile Design, National Institute of Fashion Technology, Bhopal - 462016, India

ARTICLE INFO

Article History:
Received 08th June, 2015
Received in revised form
23rd July, 2015
Accepted 10th August, 2015
Published online 30th September, 2015

Key words:

Craft cluster; artisans;
Turned wood lacquer process;
Design and market intervention;
Social, cultural, and economic influences;
sustainability.

ABSTRACT

India's art and handicrafts is asset of visual expression, communication and its technical process, portraying the religious, cultural, and social signs of different region. Due to its aesthetics and functional values the craft of the Indian cultures are valued. From the near past to the present time, turned wood lacquer craft in Budhni has thrived to be one of them. In this research work, the turned wood lacquer craft of Budhni including its process and infrastructure is studied. The type of wood, method of turning, lacquering and its finishing are studied in details. Total 60 no of artisans are interviewed for collecting the information.

***Citation*:** Soumik Halder and Debojyoti Ganguly, 2015. "An overview in to the traditional turned wood lacquer craft of Budhni of Madhya Pradesh and its challenges", *International Journal of Current Research*, 7, (9), 20866-20872.

INTRODUCTION

Madhya Pradesh has a well-known craft tradition and normally every tribe excel in certain craftsmanship. Budhni is a town and a Nagar Panchayat in Sehore District in the state of Madhya Pradesh, India. It is situated on Bhopal to Hoshangabad road at a distance of approximately 70 kms from Bhopal and approximately 10 kms from Hoshangabad, located on the banks of river Narmada at 22.78˚ N 77.68˚ E. The climate of the area sees all the predominant seasons i.e. summer, winter and monsoon. Since the town is situated on the banks of river Narmada, the climate remains humid. The establishment of textile mills like Abhishek Industries, Vardhman Industries, Trident etc. have contributed in the development of the town. The beautiful village on the banks of river Narmada provides shelter to people from different castes. As of 2011 India census, Budhni had a population of 16812 Males constituting 55% of the population and females 45% (Anonymous, 20112). The predominant castes in the Budhni cluster are mentioned in Table 1. The people of the respective caste still tend to follow the ritual of following the profession passed on by ancestors.

Corresponding author: Soumik Halder,
Department of Textile Design, National Institute of Fashion Technology, Bhopal - 462016, India.

However the population of the town majorly comprise the *Vishwakarmas* i.e. the wood craftsmen. The location of the workshop in the house (of *vishwakarmas* the crafts persons) and active involvement by all the family members facilitates learning of the craft at an early age and leads to a gradual and smooth transmission of skills. Budhni lacquer work was much regarded and popular in the pre independence times when the *Nawab of Sehore* patronized the craft. Initially it started off with the making of wooden tool handles and little other necessity /fun products like tops (*lattoo*) on the traditional manual turning machine. The craft dates back its origin to more than hundred years. It was started to generate employment amongst the craftsmen. The turned wood lacquer craft of Budhni involves the practice of artistically shaping and lacquering the wood on turning machine using *Dudhi/Dudhai* (Latin name *Wrightiya tinctoria*), *Shagwan (*Latin Name*: Tectona grandis*), Eucalyptus (Latin Name*: Eucalyptus radiate*) & *Babool (Latin Name: Vachellia nilotica)* wood.

Presently there are over a hundred families earning their bread and butter practicing the craft. The artisans are involved in family enterprise on proprietorship basis. The products that are predominantly made in the cluster are toys like, variety of handcarts for kids and few other home and kitchen utility products, wooden jewelry set, keychain etc. On turn wood

lacquer, a number of works has already done by various designers. Various Government and semi government organizations have given their input to flourish the same. It is studied by Mr. Gautam Das (Das Goutam, 2014) that Channapatna the toy town of Karnataka has been making lacquer toys- ever since Tipu Sultan, ruler of Mysore brought in artisans from Persia in the 18th century and thereby introduced the craft in India. For two centuries, the town produced mostly dolls for domestic consumption. The influx of modern alternatives especially Chinese toys battered Channapatna toy's market and the town's product were reduced to souvenirs for tourists who would stop by on the way to Mysore. However the town's fortunes are changing with micro and small entrepreneurs and niche toymakers paving the way in popularising the craft. The designers played a crucial role in making the toys contemporary. The Karnataka Handicrafts Development Corporation provides marketing support to Channapatna artisans, who number around 2,000. It could happen in Channapatna only after setting standardization in production and quality parameter. The artisans were introduced to vegetable dyes (non harmful, sustainable and eco-friendly). It is observed that the scenario as mentioned in Channapatna was almost the same as it is at present in Budhni, where the toy handcarts are mostly consumed by locals and the market is almost dominated by Chinese toys.

Turned wood lacquer in Etikoppaka (http://etikoppaka.in/about.html), Andhra Pradesh which was started in early 1900, it is studied that predominantly aesthetic appeal is used to attract the customer rather than functional appeal. It is done by using local traditions of making vegetative dyes, tools, techniques and methods for increasing shelf life of the dyes and generate new uses. The turned wood lacquer craft of Budhni is presently at a similar state where Etikoppaka wood lacquer was in mid 1980s. There are not many craftsmen who have mastered the craft in the region and earn good. There are various institutions (Srivastava, 2013) involved in promotion of handicrafts in India. Some of them are Development Commissioner (Handicrafts), Tribal Cooperative Marketing Development Federation of India Limited or TRIFED, Madhya Pradesh Handicrafts and Handloom Development Corporation, National Centre for Design and Product Development (NCDPD) through which contemporary marketing techniques may be adopted for the promotion of the craft. The present study attempts to portray the present scenario of wood turning craft in Budhni and also the challenges that the craft is facing due to market trends and demands. As per our knowledge, no formal research was done one this cluster till date only a few number of NGOs and Governmental documents are available to get a little information

MATERIALS AND METHODS

The ethnobotanical information of the types of wood which are used in Budhni cluster are studied during the cluster visit conducted by National Institute of Fashion Technology during the period 2010 to 2014 (2010 - 1 visit, 2011 – 2 visit, 2012 - 2 visit, 2013 – 2 visit and 2014 - 10 visit). The help has been taken from different artisan and consulting village elders who have details knowledge of ethnobotanical uses of different timbers in the craft. To explore the wood turning and lacquering techniques, design of the product, type of timber used, 60 no of artisan from Budhni Village were studied. The sector is unorganized. The cluster is not registered under any Governmental or Semi-Governmental organization. A base line survey was conducted to know that there are nearly 145-150 families of wood turners are living in 5 small colonies in the village. 12 Artisans from each colony were selected using snowball sampling method. Immense care has been taken by the investigator to select the artisan, who produces substantially good quantities in the cluster.

The data of the present study was collected by the interview of the artisans by filling up the questionnaire. Before the interview the artisan was informed about the purpose of the study and their verbal consent was taken before filling the questionnaire. A small pilot study over the questionnaire was also conducted to be sanguine over the authenticity of the questionnaire. Besides these interview details, photography of the craft was also taken to create a detail documentation of the same. Alongside a number of secondary research data also studied to acquire information regarding the cluster (Craft Based Design Project Documents, 2013, Product design and development documents 2013, Document on project, 2014 and Regional Centre National Afforestation and Eco-Development board, 2010). The artisans in the Budhni Clusters have been working on and mastering predominantly two processing techniques to develop basic wooden toys. They are turning & lacquering. The method of wood turning and lacquering process are explained in Fig 1 (A to X). In first stage, the raw lacquer cakes are procured from Bhopal market. The commercial lac is an encrustation which is produced from an insect name *Tachardia lacca.* This insect is found in different types of forest trees especially *Kusum (Latin Name: Schleichera oleosa*).

This *lac* is collected from Madhya Pradesh, Orissa, Maharashtra etc. Mainly three different types of lacs are used in the lacquer ware process. The highest quality of lacquer cakes ranges from 400 to 500 per KG (Fig 1A). After procuring, the lacquer cakes are broken to small pieces so that at the time of melting uniform solution may be achieved without any lumps. Otherwise in later stage they will create uneven lacquering (Fig 1B). The lacquer is heated over a *chula* (traditional house hold kiln). For 1 K.G of lacquer cakes 35-50 gms of colour pigment is added as per requirement and desired intensity once the lacquer melts on firing (Fig 1C). Besides this chemical colour Iron oxide, zinc oxide and magnesium oxide are also preferred to get different finishes. Normally the firing of lacquer takes place on a *chula* and small pieces of wooden pieces and wooden dusts are used as a fuel (Fig: 1D). Finally the lacquers of different colours are prepared and formed into stripes (Fig 1E). Dried woods with comparatively less moisture content are selected for doing the turning process from the stock which was procured from the forest department.

In order to reduce pressure on forest resources, development of Small and Medium size Forest Enterprises (SMFEs) has been done by National Forestation and Eco Development Board, Ministry of Environment and Forest Government of India. One artisan from each family is registered with local Forest Department. Accordingly they are allowed to purchase substantial quantity of unseasoned wood from Forest Department at a subsidised rate (Approx. 500 per 8 ft x 4ft x

4ft pile of particular thickness of wood per load ticket, which is approx. half a ton per year (Fig 1F). Traditionally hand wood turning machines, called *patri* in the local language were used and double point tooth was used to grip the job while turning. Presently besides hand turning machine, motor driven turning machine are also preferred to the increase production. The rotational speed of the motor driven turning machine is kept approximately 1400 RPM and above (Fig 1 G & H). For wood turning process different size and types of chisels and gauges are used. One of the main tools used for turning process are called roughing gouges. These tools are generally and are roughly U-shaped in cross-section. Their cutting edge is sharpened at around 135-145 degrees and they are used to remove stock quickly. Besides this, skew chisels of both large and small (25 mm and 12 mm) are also used. Apart from this spindle gauge, parting & bending tools were also used (Fig 1I). Before fixing the wood pieces in turning machine it was cut to desired size of the job with the help of a circular saw (Fig 1J). If the diameter of the wooden piece is little bigger (e.g. 5" diameter), a dowel is fixed at the head of the job for a better grip (Fig 1K). After that the wooden piece is fixed onto the turning machine for turning operation (Fig 1L). At the time of fixing the job on the turning machine proper alignment is done (Fig 1M). At the time of turning process, large chisels (25 mm) are used to give the first outer cylindrical form (Fig 1N) and after achieving it rough structure of the desired form is created at length (Fig 1O).

After that with the help of roughing gouges, skew chisels and spindle chisels the intricate shaping is done. (Fig 1 P & Q).After completion of turning the wooden piece is rubbed with thick sand paper (grain size 180 to 250) (Fig 1R). After the desired form is form is achieved the wooden piece is smoothen with the help of fine grain sand paper (grain size 300 to 400) (Fig 1T). After polishing with sand paper the surface of the wooden piece is coloured with the help of the coloured lacquer sticks. The lacquer is only touched over the wooden pieces. Due to tremendous abrasion between wooden job(which is at high speed) and the lacquer sticks a lot of heat is generated resulting in the lacquer to melt and fixed over the wooden pieces (Fig 1U). After the application of lacquer, *Kewra* leaf (Latin name: *Pandanus Odorifer*) which is found locally, with vegetable oil is used to achieve the final and uniform fixing of lacquer and its shine and polishing (Fig 1V) Finally finer chisels (3mm to 5 mm) are used to create certain grooves on the lacquered surface as finishing (Fig 1W). And ultimately the product is created (Fig 1X). The product area and techniques followed is still almost the same as in old times i.e. lacquered toys. But they have largely deviated away from wooden lacquered tops (*lattoo*). They now produce little more complicated toys using motorized turning machines. There have been several Governmental, Non-Governmental bodies and premier design institutes of the country who have been involved towards uplifting the craft by creating its identity thereby expanding the enterprise. But the attainments are not substantial towards the long term sustenance of the craft.

RESULTS

Wood turning process is a highly skill based artistry which totally depends upon the type of wood, kind of turning machine, type of lacquer, seasoning of wood, variety of different kinds of hand tools etc. and only after that exquisite hand crafted products is produced. Individually the roles of these factors are very important to produce the products. It is observed that different type of wood is used in this cluster. *Dudhi/Dudha*i (Latin name *Wrightiya tinctoria*) is the most used wood in the cluster. 74% of products are made of this wood. For high valued product *Shagwan (*Latin Name*: Tectona grandis*) is used. Products made with Shagwan is 12%, Eucalyptus (Latin Name*: Eucalyptus radiate*) 4% & *Babool (Latin Name: Vachellia nilotica)* wood which is a very strong wood mainly used to make the legs of the bed 8%.Apart from this 2% other woods like Mango wood (*Latin Name: Mangifera indica)* & Sheesham wood *(Latin Name: Dalbergia sissoo*) is also used as and when required. Uses of different types of wood are shown in Table 2. The preference of wood depends upon the type of design and product. Most often the artisans prefer *Dudhi / Dudhai* wood for making the toys due its easy availability, and low cost. With the help of questionnaires, personal interviews were conducted with the artisans. Total 60 no of artisans are studied as a sample of this cluster. With the evolution of times the technique and the tools used by the artisans as well as the colouring chemicals used in the cluster have gone through a lot of changes. Recent trends in wood turning process are discussed in Table 3. It is observed that in Budhni cluster two types of turning processes are used. The types of turning machine and, colouring of lacs and design of the products are mentioned in Table 3.

Table 1. Caste wise population in budhni cluster

Caste	Main Work	% of population
Vishwakarmas	Wood craft artisans	45
Machhwaras	Fishermen	13
Yadavs	Milkmen	14
Mistris	Masons	12
Brahmans	Priests	16

Table 2. Uses of different woods

Plant Name	Local Name	% of uses	Uses
Wrightiya tinctoria	Dudhi/Dudhai	74%	Mainly used for making toys beside this different accessory product is also made
Tectona grandis	Shagwan	12 %	Mainly used for making high cost product range wnich include Candle Stand, Tea Coasters, Pen Stand, Paper Weight, pencil box etc.
Eucalyptus radiate	Eucalyptus	4%	Mainly used for making toys
Vachellia nilotica	Babool	12%	Used for making legs of bed,
Mangifera indica & *Dalbergia sissoo*	Mango & Sheesham	2%	This types of woods are actually used when the above mentioned woods are not available.

Table 3. Recent trends uses in wood turning process

Turning Process	Traditional wood turning machines *(Patri)* – 17% Motorized turning machines – 83%
Coloring of *Lacs*	Natural Dyes – 5% Chemical Pigment colours – 89% Metal Oxide (like Iron Oxide, Zinc Oxide, Magnesium Oxide etc) – 6%
Selection Criteria for designing of product	Designers Product – 22% Customer Oriented Contemporary Design – 61% Traditional design – 17%

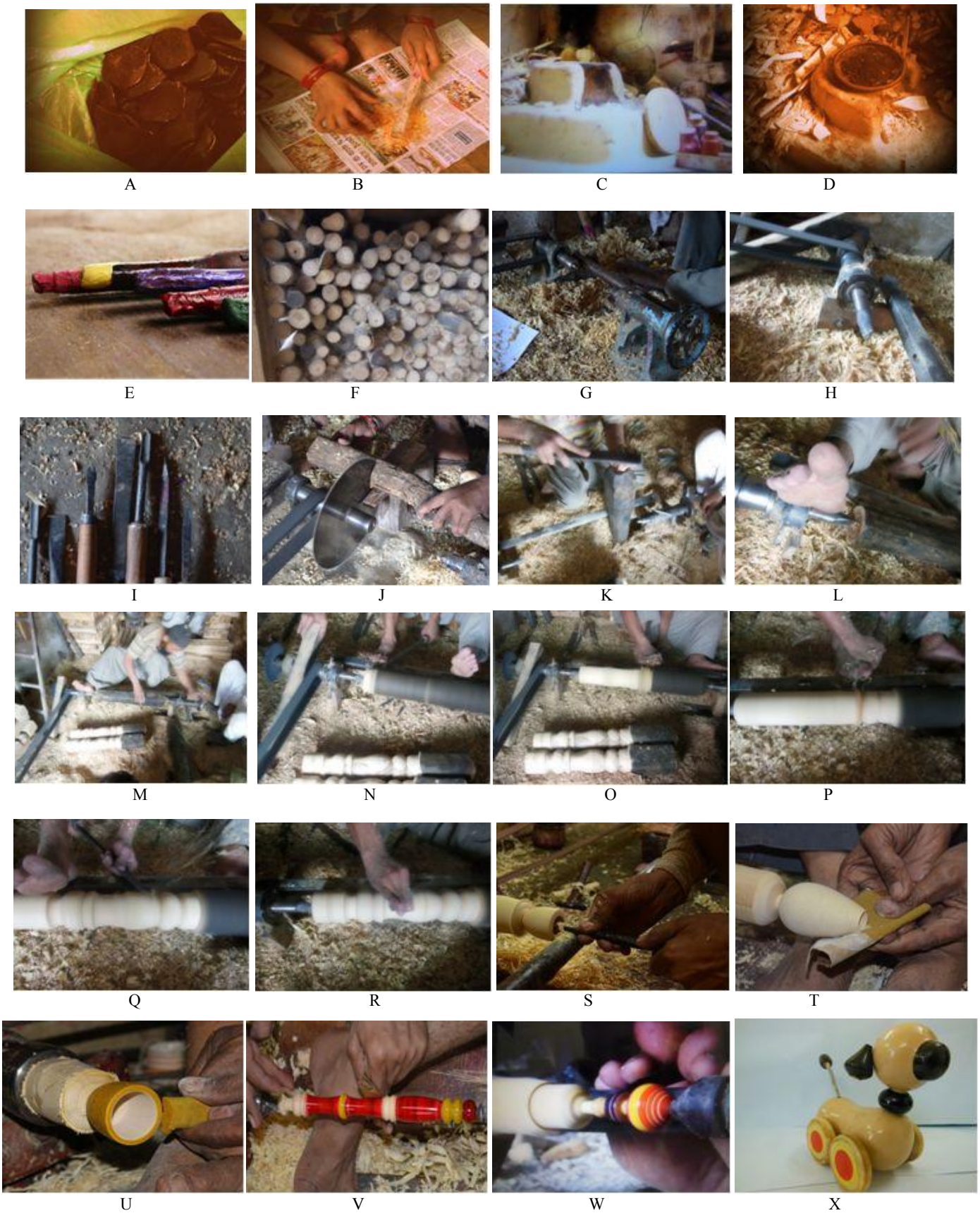

Fig. 1 (A to X). Manufacturing process toys by wood turning process

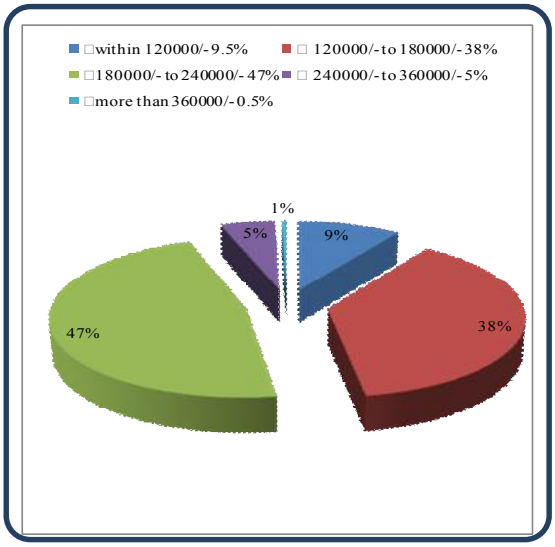

Fig. 2. Tentative monthly family income and percentage of respondent artisan families belonging to respective income band in rupees per month

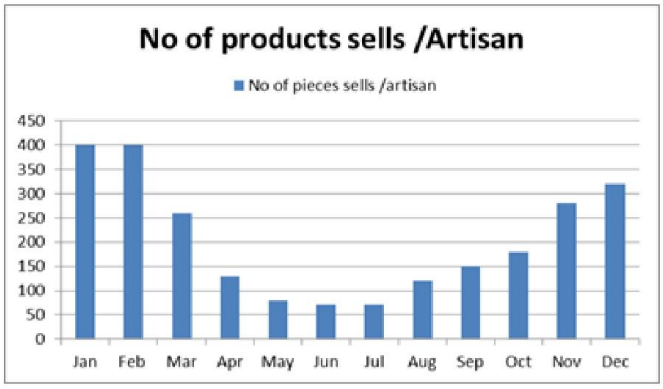

Fig. 3 Month wise sale of the product / month/ artisan

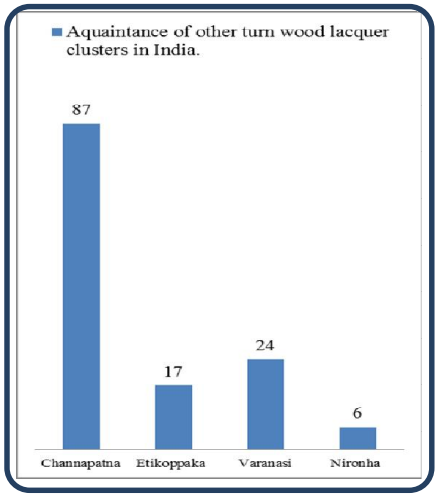

Fig. 4. Awareness of the artisan about other wood lacquer cluster in India

DISCUSSION

From Table No 3 it is observed that the most of the artisans use motorized turning machine (83%) due to high rate of production and uniform quality. Only 17% artisans use traditional turning machine. Traditional hand driven turning machine is useful where intricate design is required. Hand driven lathe is an typical example of traditional knowledge, which was popular from hundreds of years ago. But due to slow speed artisans are preferred motorized turning machine. For motorized turning machine, the artisan mainly uses two types of machine.

Spindle chuck lathe with tailstock and the lathe with a hollow cylinder without chuck and a tail stock. In local language, the hollow cylinder is called *lungi.*

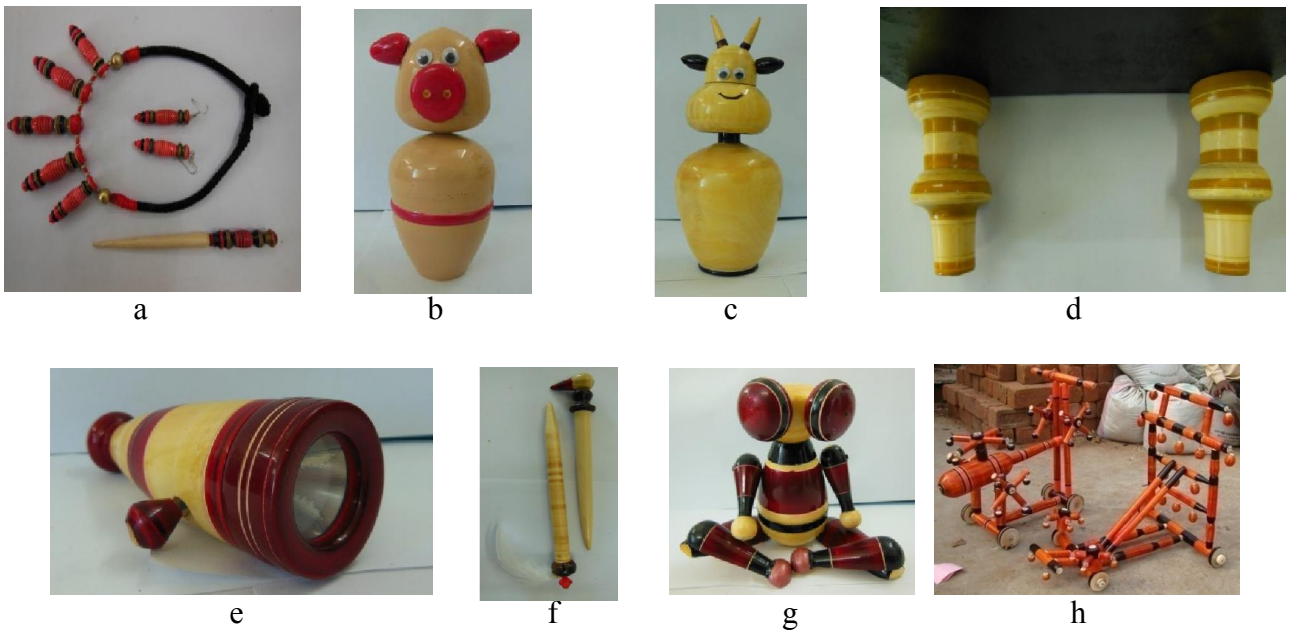

Fig. 5. Some products of wood turning lacquer in Budhni Cluster, a: Jewellery Set, b:Toys (Piggy), c: Toys (Bull), d: Wall Bracket, e: Torch, f: Hairpin, g: Toys (Frog) h: Kids Hand Cart

The *lungi* holds the wooden job from one single side allowing lacquering and finishing on the other side. It is very useful when it comes to hollow one side of the object. Different diameter of *lungi* are available with different artisans which they share amongst each other as and when required.

At the time of lacquering process it is observed for almost all product the artisan uses chemical pigment colours – 89% due to its easy availability, easy production process, availability of wide range of colours and low cost. For high end products where *Shagwan* wood is used, natural dyes are preferred as it is ecofriendly and sustainable in nature. 15-20 Years ago most of the products were coloured with using natural dyes. In certain cases where antique finish were required there different types of metal oxide was applied. The present day artisans have inherited the traditional knowledge towards the application of natural dyes and metal oxides in coloring of wooden surface.

Product development by artisans in Budhni is influenced by customer oriented contemporary design – i.e. 61%, like curtain finials, toys, spring toys, keychain, flower vase etc, Customers pick up the product depending upon how appealing the designs are. Beside this designers from National Institute of Fashion Technology and Madhya Pradesh Hastshilpa Vikas Nigam are also involved in orienting the artisan to make high end and diversified product. Only 22% of products are ingeniously made with the creativity of the designers. 17% Products are traditional like tops, wooden salt pots and pots for different spices, toys etc, which have not been abolished with the passage of time. Thus the designs have become more specific to the customer demand which keep on changing. Some pictures of the designed products are attached in Fig 5

From the interview it is observed that the peak seasons of business of the cluster are normally from August to March. In this 9 month, the sale of the product is 86% of total years production. Figure 3 shows the amount of product sales by each artisan per month. The highest sale of the products in this period is due to the following reasons:

- Festivals during this period, like *Dashera, Diwali* etc due to which the colour full toys are become center of attraction of different peoples in the fair.
- *Shubha lagna* for Hindu marriages. During this period certain traditional components in the ritual are in demand.
- Exhibitions and fairs organized by State Handicrafts Corporation/ Hast Shilp vikas Nigam are mostly organized in this period in various parts of the state. Due to which the sales of the products are increased.

On the other hand the total sale during the period of April to July drops to only 14% of the whole year. This is due to non-festive seasons and less number of tourist movement in the region due to summer. From the studies it is observed that for maximum no of artisans (85%), the monthly income is in between 12000 - 24000. Only 5.5% have income more than 24000/ month and they are designated as highly experienced artisan and for 9.5% new artisans the income is less than 12000/- per month. The pie diagram of the income as per the percentage of artisan is given in Fig 2. From the information it is observed that the income of the artisans is less and for that reasons many artisans are practicing wood work as their secondary profession. There is a particular thing which is observed in this study. Artisans belonging to different income strata have categorically different opinions. Most of the artisans with an annual income within 180000/- believe that lean period in their business begins from mid of March and lasts till August. Whereas artisans belonging to income strata of above 180000/- are of different opinion. They feel April to June is the leanest period in their business.

Referring to Fig 2, it is understood that the senior artisans of small artisan groups mostly belong to families falling in income strata between 240000/- to 360000/- per year. They also play a pivotal in the whole cluster structure and order distribution. It can be assumed that they retain orders within their families/small groups during the lean period and do not distribute the dried down orders much. It is observed that the artisans in Budhni cluster are not much aware of iconic turn wood lacquer clusters like Etikoppaka, Varanasi, Nironha except for Channapatna. The same is placed in the Fig 4 the artisans are only aware about Channapatna cluster because of a workshop conducted by Madhya Pradesh Hast ShilpVikas Nigam acquainting them to Channapatna lacquer ware in 2013-14. It can also be assumed that the turn wood lacquer cluster in Budhni has a slow growth because they are not oriented about these iconic turn wood lacquer clusters, their specialization, their market, distribution channel and branding of their product in various other parts of the country and abroad.

It is observed that the characteristic of the toys/ products made in turned wood lacquer craft cluster of Budhni mainly depends on uniqueness of lacquering & vibrant colours. The specialized product i.e. kids hand cart has no competition. There is not much of an alternative available. It is clearly understandable that the artisans were giving their opinion in context to Budhni and its nearby geographical area i.e. District Sehore, Hoshangabad and Bhopal. They are unable to think keeping in view a larger geographical area (may be the whole country) because they are not very much aware of the market outside District Sehore, Hoshangabad and Bhopal, the demand from the market outside their periphery, the channels of distribution as well as the iconic clusters (Ref Fig 4) practicing the same craft in the country and their way of branding their products. It is observed that the senior artisans in the family or a small group form the nucleus in the whole model of the cluster structure. There is existence of Herzberg's[9] factor theory of motivation in the overall functioning of the artisans. The hygiene factors[10] of the clusters are the interpersonal relation with superior/s i.e. senior artisans.

As there is no standardization of order flow this factor governs the socio-economic scenario considering behavioral interactions of individuals and groups through social capital and social "markets". The motivating factors of the clusters are the responsibility and recognition of the work of the artisan within the group/ community, quality of good work and the annual income. Another big limitation of for the cluster is lack of continuous product diversification. The artisans have limited resources for inventorying the components of certain toys in good quantity due to lack of fund, space and government help.

Conclusion

Indian handicraft industry stands a unique place because of its being important segment of decentralized sector in the country. The need based demand-fulfilling crafts cluster thrives due to low capital investment, skilled workmanship at low cost. Although Budhni turn wood lacquer cluster is one of the oldest craft in Madhya Pradesh, but they have certain constraints towards getting adapted to alternative markets. The centuries of tradition has given incredible skills to the artisans to create enticing products which are ecofriendly and sustainable in nature. The craft reflects traditions found among the people of Madhya Pradesh, so needless to say that they are the immense source of traditional knowledge. But at the time of ethnobotanical studies it is observed that they are applying their knowledge only towards creating some toys or products. So broad-basing of their knowledge to create diversified turning products is required to make them self-sustainable in the market.

There are lot of modification and adaptation in the technique of wood-turning and lacquering process as well as the selection criteria for selecting the designs which enables the products to meet the demand of the customers who are from the different socio economic strata. Besides this lack of working capital & infrastructure and technological support, lack of orientation towards new trends, unorganized market, and low returns from their products, competition from products from organized sector due to globalization are also important areas to address in this traditional knowledge. Proper help from the government or other bodies on different technological development as well as training towards different types of design as per the market demands will sustain the craft in near future. An insight in this traditional art makes one perceive about the importance of the artisans in a bigger way. It is also proposed to the artisans of Budhni to use natural dyes which is eco-friendly in nature.

Acknowledgement

The authors are grateful to all the artisans of wood turning lacquer craft in Budhni for being patient and sharing the traditional knowledge with us.

We are especially thanks to Mr. Sanjay Sharma (42); Mr. Sujan Sharma (44); Mr. Hemraj (56); Mr. Vinod Sharma (45), Mr. Jagdeesh Sharma (57), Mr. Bihari lal (49), Mr. Umesh Sharma (30) and Mr. Karan (25). We also appreciate and are gratified to Madhya Pradesh Hast Shilp Evam Hast Kargha Vikas Nigam for their extended help and coordination in touching base with the crafts persons in Budhni.

REFERENCES

Anonymous, 2012. "*Draft city development plan:* Budhni Nagar Parishad, Dist-Sehiore, M.P., Urban Administration and Development Department, Government of Madhya Pradesh; Prepared by ICRA Management Consulting Services Limited (IMACS).

Craft Based Design Project Documents, 2013. Department of Fashion and Lifestyle Accessories, National Institute Fashion Technology, Bhopal.

Das Goutam; 2014. "*Channapatna Toys: Toy Story"* Ref Site-www. http://businesstoday.intoday.in, Edition: Jan 19.2014. Checked on Date: 22.10.14, Time: 11.21AM.

Document on project 2014. "Srijan"a product design, development and technical upgradation on the turned wood lacquer artisans in Budhni. Source- Madhya Pradesh Hast ShilpEvam Hast KarghaVikas Nigam Office.

http://etikoppaka.in/about.html, checked on Date: 22.10.14, Time: 2.35PM

Regional Centre National Afforestation and Eco-Development board. 2009-2010. Annual Report, Indian Institute of Forest Management (IIFM), Bhopal.

Srivastava. A, 2013. *"Application of contemporary marketing techniques: Handicraft Industry"*. A dissertation presented to the faculty of Dept of Commerce, Delhi School of Economics. University of Delhi, by-, year 2013. Source: http://www.slideshare.net/, Date: 24.10.14, Time: 9.45AM

****