



ORIGINAL ARTICLE

## Batik Craftsmen's Knowledge Level Survey: A Study In M.P.

Anjana<sup>1</sup>, Veenu Nagar<sup>2</sup> and Saurabh<sup>3</sup>

<sup>1</sup>C. P. S. Degree College Shyodaspur, Thakurdwara, Moradabad U.P

<sup>2</sup> N.K.B.M.G. (P.G) College, Chandausi, Moradabad, U.P.

<sup>3</sup> Dr. Mrs. Saurabh, SMS, Home Science, Krishi Vigyan Kendra, Sitapur-II

### ARTICLE HISTORY

Received:  
10.03.2018  
Revised  
17.04.2018  
Accepted  
19.07.2018

### ABSTRACT

*Batik is an ancient craft representing a unique and exotic form of art. It is among one of the principal resist printing processes used in the decoration of textile. Batik is the protection of fabric from the dye by the application of a resist substance such as mud, clay, paste, wax etc. Exploratory research design was chosen to get the information on the knowledge level of the batik workers of the Madhya Pradesh and the study was undertaken in Indore, Ujjain and Bhopal. The three stage purposive sampling in combination with random technique was used to select the required sample. Present study was designed to get information about the knowledge level of artisans of traditional and modern batik regarding cloth material used, reasons of selection, source for procurement, preparation of fabric before dyeing and equipment used by them.*

**Keywords:** Traditional Batik, Modern Batik, Fabric preparation before dyeing, Batik equipments

### CITATION OF THIS ARTICLE

Anjana, Veenu Nagar and Saurabh. Batik Craftsmen's Knowledge Level Survey: A Study In M.P. Inter. J. Edu. Res. Technol. 9 [3] 2018; 01-07.

**DOI:** 10.15515/ijert.0976 4089.9.3.17

### INTRODUCTION

Batik is described as a resist technique because no colour can penetrate the parts of the fabric covered with wax. Resist printing is usually considered as a negative process in which a light coloured pattern appears against a darker background. Batik is a Javanese word to describe a certain way of obtaining a pattern upon a piece of fabric. It necessitates covering the part of the fabric which is to remain free of dye with a reserve or resist of a dye-proof substance. Melted wax is often used for this purpose but starch or flour paste or paraffin oil may also be used. Clay or mud was often used by primitive people as a resist, as well as for other purposes such as bleaching or mordanting. In the age of modernization where changes take place rapidly, everybody wants newer things to experience. The idea of novelty attracts everyone as it enlivens and invigorates the routine dullness and boredom. Hence, considering this motto, new techniques were proposed to produce a variety of designs in batik. These techniques should be easy to understand, easy to apply, eco-friendly, involve use of easily available material and also used fully for women entrepreneurs. The present study was designed to explore the knowledge level of the craftsmen engaged in the batik production with the following limitations:

1. The study was related to the batik of Indore, Ujjain and Bhopal.
2. The comparative study based only Indian batik.
3. The detail study about dyes and designs could not be gathered because it is trade secret of the dyers.

### MATERIAL AND METHODS

Exploratory research design was chosen to get the information on the knowledge level of the batik workers of the Madhya Pradesh and the study was undertaken in Indore, Ujjain and Bhopal. The three stage purposive sampling in combination with random technique was used to select the required sample. At the first stage, Indore, Ujjain and Bhopal districts of Madhya Pradesh state were selected purposively as

batik printing is practiced in these districts. At the second stage, Bhaurab Gharh village of Ujjain district was selected as batik art practiced there a lot.

At the third and final stage, the total sample of 50 respondents was selected randomly from selected districts of M.P. Seventeen respondents each from Indore, Ujjain, and sixteen from Bhopal had been selected for the present study.

Interview schedule was prepared to collect the information from the respondents. The whole schedule was divided into two sections. The first section dealt with the general information followed by the second section which dealt in detail with specific objective oriented information. The general information included the age, education, type and size of family, caste, marital status, family occupation and finally family income from all sources of the batik workers.

At its preliminary step, the tool for data collection was pre-tested before actual collection of data in order to find the validity of the interview schedule through informal discussion. In order to do pre-testing, interview schedule was administered to ten per cent of total sample. On the basis of pre-testing, questions were reframed and modified to avoid ambiguity of the statements and make them more clear. The comparative study of traditional and modern batik included information on raw material used, techniques and basic or modern equipments used in preparation of the batik.

For the knowledge, attitude and skill, the data were collected both at pre and post exposure stage whereas attribute wise symbolic feasibility data were collected only after the preparation of traditional and modern batik.

The data were collected personally with the help of self constructed interview schedule. The purpose of the study was explained to the respondents in order to satisfy their curiosity and get unbiased accurate response. Responses were noted down carefully in order to avoid confusion at interpretation stage. Through descriptive analysis, the observations were also recorded as they provide an accurate scenario of the on going process of batik.

## **RESULT AND DISCUSSION**

The observed information was documented with the help of photographs and figure. Results of the present study revealed valuable information regarding cloth used as raw material, reasons for using particular type of material for batik, Source of procurement of raw material, preparation of cloth before dyeing, Reasons of pre-preparation of the cloth, various equipments used in making of batik designs etc. The detailed results obtained from the study are as follows:

### **TYPES OF MATERIALS USED FOR BATIK AND REASONS FOR USING PARTICULAR TYPE OF CLOTH**

The data presented in Table 1, revealed that in Ujjain, Indore and Bhopal all the respondents (100%) always used cotton cloths for traditional as well as for modern batik work. Cambric cloth was also used by majority of the respondents (98%) for both type of batik in all the three districts. Only 2 per cent batik workers of Ujjain district reported to use cambric only sometimes and the same percentage of Bhopal district reported to never use it for traditional as well as for modern batik work. Silk was found the third preferred cloth used for batik work. Among the total sample, 26 per cent batik workers always used silk for traditional and modern both whereas 2 per cent batik workers sometime used silk in both types. Voiles had been used by only 1 per cent batik workers in traditional batik work whereas in modern batik work, they did not use voiles, rayon and any other materials.

### **REASONS FOR USING PARTICULAR TYPE OF MATERIAL FOR BATIK**

The entire respondents of the traditional and modern batik work used cotton for batik work. The reasons for using a particular type of material have been illustrated in Table 2. The data revealed that easy availability was the major reason reported by all the respondents of Indore, Ujjain and Bhopal for traditional as well as modern batik work. It was followed by durability aspect which had been the second major reason as reported by 2.36 per cent respondents in case of modern batik. In case of traditional batik, good appearance, durability, no knowledge about other material and economical aspect were the other reasons reported by many respondents for using a particular material for batik work. For traditional batik work few responses like as per trend, technically do not know about the effect of other material and dye absorbency were also reported by respondents. With reference to modern batik all the reasons except 'as per trend' were reported as major reasons for using a particular cloth for batik work. The comparative analysis revealed that in both the traditional and modern batik workers used simple type of material. The data revealed that in both the types 'easily available' on this material scored the highest ( $w_m=2.88$ ) and 'as per the trend' and 'technically do not know about the effect of other materials' by the batik workers use the lowest ( $w_m=0.63$ ) in the traditional and modern type of batik respectively ( $w_m=0.86$ ) and ( $w_m=0.76$ ).

**Table 1: Type of particular cloth used for batik work**

S. No	Reasons+	Traditional				Modern			
		Ujjain 17*	Indore 17*	Bhopal 16*	Total 50**	Ujjain 17*	Indore 17*	Bhopal 16*	Total 50**
1.	<b>Cotton</b>								
	Always	17 (34)	17 (34)	16 (32)	50 (100)	17 (34)	17 (34)	16 (32)	50 (100)
	Some time	-	-	-	-	-	-	-	-
2.	<b>Cambric</b>								
	Always	17 (34)	16 (32)	16 (32)	49 (98)	17 (34)	17 (34)	16 (32)	49 (98)
	Some time	-	01 (02)	-	01 (02)	-	-	-	-
3.	<b>Silk</b>								
	Always	14 (28)	09 (18)	03 (06)	26 (52)	06 (12)	07 (14)	-	13 (26)
	Some time	-	01 (02)	-	01 (02)	-	-	-	-
4.	<b>Voiles</b>								
	Always	-	01 (02)	-	01 (02)	-	-	-	-
	Some time	-	-	-	-	-	-	-	-
5.	<b>Rayon</b>								
	Always	-	-	-	-	-	-	-	-
	Some time	-	-	-	-	-	-	-	-
6.	<b>Any other Specification</b>								
	Always	-	-	-	-	-	-	-	-
	Some time	-	-	-	-	-	-	-	-
6.	<b>Never</b>	17 (34)	17 (34)	16 (32)	50 (100)	17 (34)	17 (34)	16 (32)	50 (100)

**Table 2: Reasons for using particular type of material for batik**

S. No	Reasons+	Traditional				Modern			
		Ujjain 17*	Indore 17*	Bhopal 16*	Total 50**	Ujjain 17*	Indore 17*	Bhopal 16*	Total 50**
1	Easily available	2.94	2.94	2.77	2.93	2.94	2.94	2.77	2.93
2.	Economical	1.56	1.73	1.04	1.33	2.07	2.77	1.90	2.25
3.	As per the trend	0.69	0.69	0.52	0.63	0.86	0.86	0.86	0.86
4.	No knowledge about other material	2.59	1.56	1.38	1.84	2.42	2.07	2.25	2.21
5.	Technically do not know about the effect of other material	1.21	0.17	0.52	0.63	2.42	2.07	2.25	2.21
6.	Good appearance	2.25	1.03	2.42	1.90	2.59	1.38	2.59	2.19
7.	Durable	2.77	-	2.42	1.73	2.77	1.90	2.42	2.36
8	Dye absorbent	2.77	-	-	0.92	2.77	2.07	2.77	2.54

**SOURCES FOR GETTING THE MATERIAL**

The data pertaining to sources for getting the material had been presented in Table 3. The data revealed that highest per cent of batik workers (34%) of Indore always used local market for getting the material for traditional as well as for modern batik. Very few traditional workers of Ujjain (4%) used local market sometime for procurement of material. The comparative data for traditional and modern workers

revealed that majority of traditional (82%) and modern workers (84%) used local market as a source for getting the material.

Nearby city/town as a source for getting the material always had been as reported by maximum 30 per cent respondents of Ujjain in case for traditional batik whereas 20 per cent in case for modern batik only. Very few (only 2%) traditional workers of Ujjain and Bhopal some time used nearby city/ town as a source for material. In case of modern batik, only 4 per cent workers of Ujjain sometime used nearby city/ town and 02 per cent modern batik workers of Indore and Bhopal used nearby city/town as a source for getting material. Comparative study of both traditional and modern workers revealed that 4 per cent of traditional and 8 per cent of modern workers sometime used nearby city/town as a source of getting material for batik work.

The highest per cent 08 per cent was reported that in case of traditional workers from Ujjain that they used 'availability at none' never and 02 per cent from Indore and Bhopal workers 'availability at none' never. Whereas in modern batik workers the highest per cent 06 per cent from Ujjain used 'availability at none' and lowest 02 per cent from both Indore and Bhopal respectively. But when be compare the both traditional and modern workers we can found that 12 per cent and 10 per cent respectively used 'availability at none'.

#### PREPARATION OF CLOTH BEFORE DYEING

The data presented in Table 4 revealed that highest per cent of traditional (26%) as well as modern (34%) of Indore always prepare cloth before dyeing by bleaching. The lowest percentage of batik workers of Ujjain for traditional (16%) and modern (30%) batik were reported to prepare cloth before dyeing by bleaching. The comparative evaluation of both traditional and modern batik revealed that majority of workers always prepare cloth before dyeing by bleaching, traditional worker (62%) and modern workers (96%). Only 6 per cent traditional workers never prepare cloths by bleaching and in case of modern only 1per cent never prepare cloths before dyeing by bleaching.

Table 3: Sources for getting the material

S. No	Sources+	Traditional				Modern			
		Indore 17*	Ujjain 17*	Bhopal 16*	Total 50**	Indore 17	Ujjain 17*	Bhopal 16*	Total 50**
1.	Local market								
	Always	17 (34)	08 (16)	16 (32)	41 (82)	17 (34)	09 (18) -	16 (32) -	42 (84) 02 (04)
	Some time	-	02 (04)	-	-	-	-	-	-
	Never	-	--	-	-	-	-	-	-
2.	Near by city /town								
	Always	01 (02)	15 (30)	- -	16 (32)	01 (02)	10 (20) 02 (04)	- - 01 (02)	27 (54) 04 (08)
	Some time	-	01 (02)	01 (02)	02 (04)	01 (02)	-	-	-
	Never	-	-	-	-	-	-	-	-
3.	Availability at none								
	Always	-	-	-	-	-	01 (02)	-	01 (02)
	Some time	-	-	-	-	-	-	-	-
	Never	01 (02)	04 (08)	01 (02)	06 (12)	01 (02)	03 (06)	01 (02)	05 (10)

With regard to boiling as a preparation of cloth before dyeing the data revealed that all the sample respondents of Indore and Bhopal always boil the cloth in both traditional and modern batik. In case of traditional batik, only few respondents of Ujjain (4%) some time and never (4%) boil the cloth before dyeing. In case of modern 4 per cent from Ujjain some time and 8 per cent never boil the cloths before dyeing. The comparative data revealed that 82 per cent traditional batik workers always prepare cloths before dyeing by boiling and in case of modern 84 per cent prepare always cloths by boiling.

Lowest per cent (2%) prepare cloths before dyeing by steaming in traditional and in case of modern 6 per cent from Bhopal and 2 per cent from Ujjain and Indore. When we compare both, 2 per cent from traditional and 14 per cent modern batik workers always prepare the cloth before dyeing by steaming.

**Table 4: Preparation of cloth before dyeing**

S. No	Process+	Traditional				Modern			
		Indore 17*	Ujjain 17*	Bhopal 16*	Total 50**	Indore 17	Ujjain 17*	Bhopal 16*	Total 50**
1.	Bleaching								
	Always	13 (26)	08 (16)	10 (20)	31 (62)	17 (34)	15 (30) -	16 (32)	48 (96)
	Some time	-	-	-	-	-	-	-	-
	Never	-	03 (06)	-	03 (06)	-	01 (02)	-	01 (02)
2.	Boiling								
	Always	17 (34)	08 (16)	16 (32)	41 (82)	17 (34)	10 (20) 01 (02)	16 (32)	42 (84)
	Some time	-	02 (04)	-	02 (04)	--	04	-	01 (02)
	Never	-	02 (04)	-	02 (04)	-	08 (08)	-	04 (08)
3.	Steaming								
	Always	01 (02)	-	-	01 (02)	02 (04)	02 (04)	03 (06)	07 (14)
	Some time	-	-	-	-	-	-	-	-
	Never	01 (02)	06 (12)	01 (02)	08 (16)	01 (02)	06 (12)	01 (02)	08 (16)
4.	Any other (Specify)								
	Always	-	-	-	-	-	-	-	-
	Some time	-	-	-	-	-	-	-	-
	Never	-	02 (04)	-	02 (04)	-	02 (04)	-	02 (04)

**REASONS FOR PREPARATION OF CLOTHS**

The entire respondents of traditional and modern batik prepare the cloth due to several causes as presented in Table 4. The data revealed that in the traditional type 'dye absorbent' scored the highest (wm=2.88), followed by 'easy to make' (wm=2.71). In the modern type used highest score 'easy to make' (wm=2.88), followed by 'dye absorbent' (wm=2.77) and lowest score 'commonly used' of prepare the cloth in traditional and modern worker are respectively (wm=0.80) and (wm=0.92).

**TYPE OF EQUIPMENT USED FOR BATIK**

The data presented in Table 6 revealed that in traditional batik majority of the workers of Indore (30%), Ujjain (26%) and Bhopal (18%) always used brushes for batik making. There were 10 per cent workers of Ujjain and Bhopal and 2 per cent of Indore, who sometime used brushes whereas 4 per cent of both Ujjain and Bhopal and 2 per cent of indore never used brushes for batik making. In case of modern work, the highest percent of workers of Bhopal (16%), Indore (12%) and Ujjain (8%) always used brushes for batik making. Further, few workers of Ujjain (10%) and Bhopal (8%) reported that they sometime used brushes for batik making whereas 14 per cent of Indore, 6 per cent of Ujjain and 4 per cent of Bhopal never used brushes for batik. When compared both traditional and modern, it was found that 68 per cent of traditional and 36 per cent of modern batik workers always used brushes followed by 22 per cent of traditional and 26 per cent of modern workers who sometime and 10 per cent of traditional and 24 per cent of modern workers who never used brushes for batik making.

With regard to use of block for batik, the data revealed that majority of the respondents of Ujjain (34%), Indore and Bhopal (26% each) reported that they always used block in case of traditional work. Only 4 per cent of Bhopal and 2 per cent of Indore never used block for batik making. In case of modern batik work, 34 per cent of Ujjain and 30 per cent of Indore and Bhopal reported that they always used block for batik making whereas 4 per cent of Indore sometime and 2 per cent of Bhopal never used block for batik making. The comparative data of both traditional and modern workers revealed that 86 per cent of traditional workers and 94 per cent of modern workers always used block for batik printing.

Metal wire block was sometime used by 20 per cent workers in the traditional batik whereas 54 per cent never used metal wire block for batik. In case of modern work, 58 per cent workers reported to use the

**Table 5: Reasons for preparation of cloth**

S. No	Reasons+	Traditional				Modern			
		Indore 17*	Ujjain 17 *	Bhopal 16*	Total 50**	Indore 17	Ujjain 17	Bhopal 16	Total 50
1	Easily to make	2.77	2.42	2.77	2.65	2.94	2.77	2.77	2.83
2.	Cloth cannot shrink.	2.94	1.90	2.59	2.48	2.94	1.90	2.77	2.54
3.	Dye absorbent	2.94	2.94	2.77	2.88	2.77	2.77	2.77	2.77
4.	Commonly used	0.34	1.56	0.52	0.81	0.52	1.73	0.52	0.92
5.	Better appearance	2.59	2.59	2.77	2.65	2.94	2.42	2.77	2.71
6.	Increase durability	1.56	-	1.21	0.92	1.56	1.21	1.04	1.27

A= Agree; Ud= Undecided; Ds= Dis-agree; +Multiple responses; \* Number of respondents in one district

\*\* Total number of the respondent

**Table 6: Type of equipment used for batik making**

S No	Name of equipment+	Traditional				Modern			
		Indore 17*	Ujjain 17 *	Bhopal 16*	Total 50**	Indore 17*	Ujjain 17*	Bhopal 16*	Total 50**
1	Brushes								
	Always	15 (30)	10 (20)	9 (18)	34 (68)	6 (12)	4 (8)	8 (16)	18 (36)
	Some time	1 (2)	5 (10)	5 (10)	11 (22)	5 (10)	4 (8)	4 (8)	13 (26)
2.	Block								
	Always	13 (26)	17 (34)	13 (26)	43 (86)	15 (30)	17 (34)	15 (30)	47 (94)
	Some time	- (-)	- (-)	- (-)	- (-)	2 (4)	- (-)	- (-)	2 (4)
3.	Metal wire block								
	Always	- (-)	- (-)	- (-)	- (-)	10 (20)	11 (22)	8 (16)	29 (58)
	Some time	6 (12)	- (-)	4 (8)	10 (20)	- (-)	- (-)	- (-)	- (-)
4.	Frame and abroon paper								
	Always	17 (34)	17 (34)	16 (32)	48 (96)	17 (34)	17 (34)	16 (32)	48 (96)
	Some time	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
5.	Pen								
	Always	15 (30)	17 (34)	11 (22)	43 (86)	10 (20)	17 (34)	12 (24)	39 (78)
	Some time	- (-)	- (-)	3 (6)	3 (6)	3 (6)	- (-)	4 (8)	7 (14)
Never									
	2 (4)	- (-)	2 (4)	4 (8)	2 (4)	- (-)	- (-)	4 (8)	

metal wire block whereas 22 per cent never used a metal wire block for batik. The comparative data of both traditional and modern batik work revealed the same trend in both kinds. Frame and abroon paper was always used by 96 per cent workers in the traditional batik. In case of modern batik, 100 per cent

workers always used frame and abroon paper for batik making. Pen (hand made pens) as an equipment for batik had been reported to be used always by majority of the respondents of Ujjain (34%), Indore (30%) and Bhopal (22%) in case of traditional batik work. There were 6 per cent workers of Bhopal who sometime and 4 per cent of both Indore and Bhopal who never used pen for batik making. In case of modern batik, majority of respondents of Ujjain (34%), Bhopal (24%) and Indore (20%) always used pen whereas 8 per cent of Bhopal and 6 per cent of Indore sometime and 8 per cent of Indore never used pen for batik making. From comparative analysis of both traditional and modern batik, it was found that 20 per cent of traditional and 78 per cent of modern batik workers always used pen for batik making.

#### REASONS FOR USING PARTICULAR TYPE OF EQUIPMENT

The data pertaining to reasons for using particular type of equipment presented in Table 7 revealed that 'easy to handle and easy to available' than the floral designs scored the highest in case of traditional and modern (wm=2.94) both followed by 'no knowledge about other equipment'(wm=2.54) and (wm=2.31) respectively. The lowest score in both the type (wm=0.63) and (wm=0.00) respectively.

**Table 7: Reasons for using particular type of equipment**

S. No	Reasons+	Traditional				Modern			
		Indore 17*	Ujjain 17 *	Bhopal 16*	Total 50**	Indore 17*	Ujjain 17*	Bhopal 16 *	Total 50**
1	Easy to handle	2.94	2.94	2.77	2.88	2.94	2.94	2.77	2.88
2.	Easily available	2.94	2.94	2.77	2.88	2.94	2.94	2.77	2.88
3.	Repeatedly	-	0.52	1.38	0.63	-	-	-	0.00
4.	According to design	2.77	2.59	1.90	2.42	1.38	1.73	2.59	1.90
5.	Used during training	0.52	0.17	1.38	0.69	0.86	0.69	1.38	0.98
6.	No knowledge about other equipments.	2.59	2.25	2.77	2.54	2.25	2.25	2.42	2.31

+Multiple responses

\* Number of respondents in one district

\*\* Total number of the respondent

#### CONCLUSION

The inference of the results shows that cotton cloths is used for traditional as well as for modern batik work which is followed by cambric cloth and Silk, whereas voile is least liked cloth while they did not use voiles, rayon and any other materials for batik. In case of traditional batik, good appearance, durability, no knowledge about other material and economical aspect were the other reasons reported by many respondents for using a particular material for batik work. For traditional batik work few responses like as per trend, technically do not know about the effect of other material and dye absorbency were also reported by respondents. With reference to modern batik all the reasons except 'as per trend' were reported as major reasons for using a particular cloth for batik work. They somehow preferred to prepare cloth before dyeing by bleaching and boil the cloth but at the same time few of them never prepare cloths. The entire respondents of traditional and modern batik prepare the cloth to make it suitable for dye absorption and easy to make. In traditional batik majority of the workers used brushes for batik making. For making of designs most of them always used wooden block in case of traditional as well as modern batik. Metal wire block were also sometime used to create designs from resist materials on the batik cloths.

#### REFERENCES

1. Anjana, Nagar, B. and Saurabh. (2018). Development of resist dyeing techniques for batik work. International Journal of Education Research and technology. 9(1)2018:55-57.
2. Anjana and Nagar, V.(2010). A comparative study of traditional and modern batik. Asian Journal of Home Science. 4(2): 390-391.
3. R.H. Wright, A.T.I (2000). Modern Textile design and production. Industrial Designer and consultant (Portland Designs Ltd) London page No. 11-13.
4. Sastrio, T.B. (2000). Building on Batik – The Globalization of a craft community U.K: Ashgate publishing Ltd. 307-313.