An Analysis of Influencing Factors in Production of Handicraft Sector in India

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Abstract

Handicraft has been most diversified sector in India which scattered each state of the country. It is second largest employment generating sector after agriculture and mostly cottage-based production. The artisans of the crafts have plays fundamental responsibility to produce the quality products to the market but production section of the craft has facing so many problems, which adversely effects the overall sector. In this study, we investigate the most prominent issues related to the production section of the crafts which influence the handicraft sector. The major influencing factors of the production section are fundamental support, manufacturing prospects, Information dissemination, procurement process and obstacles & Obstruction. These factors help to build up a elementary framework for the production of the crafts products and also provide a competitive products in the markets.

The paper is divided into four sections in which, the first sections discuss about the production section of the handicraft. The next section includes review of literature of different parameters of the production which influence the making of the handicraft sector. The third section deals about the objectives and research method of the paper and fourth part of the paper includes data analysis and interpretation of the influencing factors of the handicraft sector. The last section includes the findings and conclusions of the paper which highlighted the most influencing construct which control the whole production part of the handicraft sector.

Key Words: Handicraft, Production, Quality, Traditional, Markets, Customers etc.
Introduction
As we know that Indian handicraft sector is an oldest sector, which spread throughout the
country with different customs and traditions. It has been a legacy as a crown of a king in the
world markets for their quality and diversifies of craft products. Indian handicraft was the world
largest diversify products categories which attracted the customers throughout the world and
also fulfill their demands according to their choices. India was the world largest handicraft
products exporter and foreign exchange earner in the world market. The producers of
handicrafts scattered in different parts of the country generally in the rural area.
Handicraft have a great prospective to provide jobs to existing set of millions of artisans but
also for progressively a greater number of the new entrants in the sector. The most common
problems which influence the overall development are lack of education, absence of market
intelligence, low capital, poor exposure to new technologies and poor institutional framework
(Annual Report, Ministry of Textile, 2018). The ministry of textile started so many
developmental programs like social interventions, technological interventions, marketing
interventions and financial intervention to promote handicraft by developing artisans’ clusters
into professionally managed and self-reliant community enterprise (Annual Report, Ministry
of Textile, 2017).
Zhu Yihao and Zhu Yuning (2010) in their studied they found that the, pessimistic factors like
large design flexibility, pathetic and complex production process, lack of involvement of
contemporary manufacturing system, which adversely influence the production of craft items.
M. L Meena (2011) found that ergonomic factors have harmfully exaggerated the working
condition of artisans in handicraft sector. Ergonomic factors talked about scientific studied of
association between artisans and their functioning environment. The researcher tried to focus
on the different factors, which pessimistically affects the efficiency of the workers. Sanjay
Mahapatra (2011) said that, there is an obligation to improve the producing condition of
artisans in their houses. In organized producing centre, craftsmen earned better wages, quality
of products is good but in unorganized places artisans were incapable to maintain the quality
of products.
The handicraft is small scale and cottage-based works which help to solve the social and
economical problems of the artisans and nearly 70 lakhs of workers are involved in the
production of the craft. Most of the workers belong to the weaker section of society including
women artisans. The production phase of the crafts has been playing a significant to overall
growth and development of the handicraft sector. There is need to examine the each and every
sub segment of the craft production, so that we can find out the point of value creation in the
products. As we know that most of crafts products are exported in the world market, so that we should produce the crafts according to the international standard. Domestic market of India is also a potential market and craftsmen should also provide the products according to the test and preference of the customers.

More than 7 million of the crafts persons are working as a backbone of the craft sector and government should provide training to these people, so that they use new tools and techniques in the production activities of the handicraft products. The production an activity has been plays an important role to provide a well-furnished and quality product to the customers.

**Review of Literature**

The prime purpose of the literature review to provide a fundamental knowledge of the said topic and to find the research gaps which provide the basic framework for the researchers for further work. According to the Neha Nagori (2012), rural artisans play a very important role in the production of handicraft products but workers are using the traditional methods which adversely affect the overall productivity. They have no knowledge about the about the contemporary marketing techniques like, quality delivery, packaging and services after sales etc. Kumar and Rajeev (2013) discussed about the internet task regarding manufacturing process, production techniques, increase visibility of crafts items and facilitate the customer through different information of the crafts products. Blerin Kola (2012), conducted his studied in Uyghur’s, with Turkin people and found that the web marketing playing a significant role in selling of crafts items to the customers. He also said that increasing competition in crafts sector pressurized the artisans to produces quality and identical products for the market.

According to the Mukherjee, et al. (2016) modern technology has been increases the focus of the handicraft sector which help to renovate the total working style of the sector. The prime focus areas of crafts were product design, quality assurance, manufacturing methods and artisans training. In the same way David Makofsky (2013), examine the role of culture and experience of artisans in the crafts items but the market scenario has been changing continuously which adversely influence the market demands. He concluded that the artisans should change the production techniques, so that they create and fulfill the demand of the markets. Ajay k. Garg, (2005) author highlighted the consequence of quality management to all organization including handicraft sector and he suggested the five dimensions like products or services quality, quality of total system of operation, attitude & its quality process, workers and management consciousness towards quality which help to maintain and improve the quality of products.

The manufacturing of crafts has been a key player in handicraft sector; likewise, Shaw (2011)
described the whole procedure of manufacturing of “Bankura Horse” which comes under Terracotta crafts. It is one of oldest craft work in West Bengal which has concerned by specific caste or community people called “Kumbhkhar” and they well known about all activities of works from homework of raw materials, mixing of clay appropriately, wheel work, drying, Handwork, Motifs work, final design, coloring, firing and testing and sorting. Artisan who worked in this field has faced different problems old technique and design, like lack of space, lack of quality and lack of raw materials etc. Abdusalam (2009) carried his work on design of web-based marketing appliance for handicrafts operator in Kedah, in which information technology (IT) is a pioneering idea to use in handicraft because its role is increase day by day in manufacturing, banking, finance, Academic works etc. which help to make these sectors much more competitive and innovative. It also helps to take innovative changes in the handicraft field.

Similarly, Goyal et al (2005) put emphasis on the role of quality management in handicrafts and the numbers of quality conscious customer’s increased, which increased the importance of quality products in the present days. The data were collected from different manufacturing units of craft products. They divided into based on five dimensions like quality of product or service, quality of total system of operation, quality process, attitude & consciousness of management regarding quality and workers attitude towards quality, which help to maintain or improve quality of products.

**Statement of the Problem**

Manufacturing segment of craft products is a backbone of handicraft sector which has been playing a significant function in the overall growth and development of the sector. But the Indian handicraft sector still uses the same traditional methods for the production of crafts items which adversely influence the effectiveness and efficiency of the craft products. In the response of this problem, our study proposes to investigate the existing factors which influence the manufacturing phase of the handicraft sector.

**Objective of the study**

To examine the factors, influence the production of handicraft products?

**Research Methods**

The research paper is descriptive as well as exploratory in character and the populations of the study were all the producers of handicraft products in Uttar Pradesh. The total sample size was 384 handicraft produces in selected districts of the Uttar Pradesh and districts were chosen through convenient sampling techniques. The primary data were collected through snow ball sampling technique from the producers of the handicraft in selected districts and secondary
data were collected through research papers, monographs, annual reports, articles etc. used for the preparation of the questionnaire. The Cronbach’s-alpha was used to check the reliability of the questionnaire, exploratory factors analysis method used to identify the factors which influence the production of the craft products.

**Analysis and Interpretation**

The descriptive statistics depicted that, 91.80% respondents were male and 8.20% respondents were female. The average age of the artisans who involved in the production of the handicraft were 40-50 years, which constituted 42.60%, followed by the age group of 55-60 years with 31.50% respondents and 23.40% producer’s age group were 30-40 years. 53.60% respondents’ family size were 5-8 members, 36% artisans’ family size were 9-12 members and 18.70% producers’ family size were 13-16 members in the family. More 50% artisans were monthly earning income less the Rs.5000 per month and 24% producers were earn Rs. 10000 per month in the selected crafts in the handicraft sector.

**Reliability Test**

**Reliability**

**Scale: All Variables**

<table>
<thead>
<tr>
<th>Case Processing Summary</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid</td>
<td>384</td>
<td>100.0</td>
</tr>
<tr>
<td>Excluded(^a)</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^a\) Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>.898</td>
</tr>
<tr>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

A total of 384 complete responses were obtained out of 445 respondents approached. Reliability test was employed on the response received from manufactures of the handicrafts. The reliability of the data was checked by calculating Cronbach-alpha (α) which was found to be .898 (> .7), well within acceptable range and good for further statistical tools.
Exploratory Factor Analysis

**KMO and Bartlett's Test**

<table>
<thead>
<tr>
<th></th>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>0.917</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square</td>
<td>3356.042</td>
</tr>
<tr>
<td></td>
<td>Df</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Factor analysis through principal component analysis with varimax rotation method was applied on the manufactures production activities of handicraft products questionnaire and items with factor loading above 0.50 were considered to determine items clubbed into a single factor. Further, measure of sampling adequacy through KMO comes out to be 0.917 and Bartlett’s test of Sphericity indicate the Chi-square of 3356.042 with df= 231, p= .000<0.05]. These values indicate the appropriateness to proceed with factor analysis.

**Total Variance Explained**

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>2</td>
<td>2.769</td>
<td>12.589</td>
<td>45.045</td>
</tr>
<tr>
<td>4</td>
<td>1.209</td>
<td>5.493</td>
<td>57.421</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Five factors emerged prominently covering 62.039% percent variance. The identified factors were analyzed for a common thread and accordingly the naming of the factors was performed.

**Factors Identified**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Factor</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Infrastructural Support</strong></td>
<td>Government training helps in developing innovative ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sector require technology up-gradation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quality control during manufacturing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New dimension for handicraft due to direct involvement of government</td>
</tr>
</tbody>
</table>
2. **Markets Demand**
- Produce products according to the wholesalers
- Products produced are unique or rare in markets
- Handicraft with utilitarian value is high in demand
- Wholesalers indifferent towards traditional and machine products
- Convince wholesalers to purchase products manufactured

3. **Information Diffusion**
- Modern marketing techniques help promote sales
- Catalogues are provided to wholesalers for placing order
- Products repository on website help wholesalers and customers
- Manufactures details at tourist information Centre promote sales

4. **Procurement Process**
- Availability of seasonal raw materials
- Availability of transportation facilities
- Requirement of storage facilities of raw materials
- Raw material sufficient to fulfill demands

5. **Lack of Carrier Prospects**
- Young never pursue due to lack of opportunities
- Accept single customized products- out of the way
- Experience shortages of money
- Involve family members in manufacturing process

### Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government training helps in developing innovative ideas</td>
<td>.754</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sector require technology up-gradation</td>
<td>.746</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality control during manufacturing</td>
<td>.729</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ergonomic intervention required to reduce health problems</td>
<td>.700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New dimension for handicraft due to direct involvement of government schemes</td>
<td>.696</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Produce products according to the wholesalers</td>
<td>.790</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handicraft with utilitarian value is high in demand</td>
<td>.781</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handicraft with utilitarian value is high in demand</td>
<td>.747</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesalers indifferent towards traditional and machine products</td>
<td>.731</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convince wholesalers to purchase products manufactured</td>
<td>.715</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern marketing techniques help promote sales</td>
<td></td>
<td></td>
<td></td>
<td>.755</td>
<td></td>
</tr>
</tbody>
</table>
Catalogues are provided to wholesalers for placing order | .725  
Products repository on website help wholesalers and customers | .709  
Manufactures details at tourist information Centre promote sales | .675  
Availability of seasonal raw materials | .714  
Availability of transportation facilities | .699  
Requirement of storage facilities of raw materials | .691  
Raw material sufficient to fulfill demands | .620  
Young never pursue due to lack of opportunities | .735  
Accept single customized products- out of the way | .732  
Experience shortages of money | .729  
Involve family members in manufacturing process | .707  

**Extraction Method:** Principal Component Analysis.  
**Rotation Method:** Varimax with Kaiser Normalization.

Rotation converged in 6 iterations.

**Interpretation:**

According to the above table indicating the rotated component matrix, the first factor comprises of five items: Government training helps in developing innovative ideas, Sector require technology up-gradation, Quality control during manufacturing, Ergonomic intervention required to reduce health problems and new dimension for handicraft due to direct involvement of government schemes with a loading 32.456 % was named as Infrastructural Support.

The second factor consist of five items which includes: produce products according to the wholesalers, products produced are unique or rare in markets, handicraft with utilitarian value are high in demand, wholesalers indifferent towards traditional and machine products and convince wholesalers to purchase products manufactured with a loading 12.589% and factor was named as Markets Demand.

The third factor consist of four items which involves: modern marketing techniques help promote sales, catalogues are provided to wholesalers for placing order, products repository on website help wholesalers and customers and manufactures details at tourist information centre promote sales with loading of 6.883% and factor was named as information diffusions.

The fourth factor comprises of four items, which involves: availability of seasonal raw materials, availability of transportation facilities, requirement of storage facilities of raw materials and raw material sufficient to fulfill demands explaining 5.483% of variance and
factor was named as Procurement process.
The fifth factor comprises of four items: young never pursue due to lack of opportunities, accept single customized products- out of the way, experience shortages of money and involve family members in manufacturing process explaining 4.618% of variance and factor was named as lack of Carrier Prospects.

Conclusions
It could be concluded that the production phase or part of the handicraft playing a crucial role in the overall growth and progress of the handicraft sector. In this section, artisans or craftsmen have direct involvement from products design up to finished products. Indian handicraft sector should focus on training should be based market demand, update technology, quality control system should be executed during productions and training should be based according to the crafts. The artisans should organize weekly meeting, in this meeting they share their knowledge, problems, government schemes, exhibitions and market information about products.
This sector should also focus on modern marketing medium like Television, magazine, newspapers, Internet, and social media such as Facebook, Instagram, We-Chat, Twitter etc. which help to increase awareness and motivate them to buy the products. The producers should keep catalogues, website for retailers, customers for better decision making and information dissemination about the available products and upcoming items. Quality, transportation, storage, availability have an important role to continue the production of crafts products. As we know that the young generation never pursues this work due to lack of career opportunities
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