

REVAMPING BAMBOO PRODUCTION STRATEGIES IN PALGHAR DISTRICT, MAHARASHTRA: A POST-PANDEMIC SUSTAINABILITY APPROACH

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Abstract

This research paper aims to assess the Production strategies used by Bamboo industry in production of various bamboo based product after COVID-19 pandemic in Palghar District. Production strategies are considered very important for every business organization, so it must be properly planned and implemented for the success and growth of business. The study was done as a part of descriptive research. Convenience sampling technique was employed for selecting the sample. The primary data was collected by means of questionnaire. The analysis leads over the conclusion that the craftsmen's have adopted mix production strategies - Chase strategy, Make-to-stock, Make-to-order for producing their product. The research also suggested some measures to be taken by the craftsmen's.

Keywords: Production Strategies, Craftmans, Bamboo Based Product, Covid-19.

Introduction

In Palghar district, the majority of bamboo based industry is small in nature, family oriented or part-time and thrive on traditional manual work procedures. The procedures are relatively labour intensive and performed with traditional devices that are of low technology and production capacities. In addition, the product designs fail to receive sufficient attention. The local designers are trying to meet local requirement. Most of the local manufacturers rely on existing ethnic designs or copying ideas from other sources for the development of new product designs. Although bamboo has numerous uses, most of the woven commodities are traditional and low-value products, but are demanded in low quantity due to wide utilization of plastic and metal products. But now after Covid – 19 as people have become more conscious about environmental friendly product there may be demand for the bamboo product. Therefore, the present study will make an attempt to know the different production strategies used in bamboo industry after Covid-19.

What are production strategies?

Production strategies, or production planning strategies, are the different methods a company uses to plan the future production of goods and materials at a manufacturing plant. Implementing various production planning strategies creates a foundation that can help determine how much of each product to create. Then it's easier to schedule the production of the materials, which focuses on who is going to be needed to help with production and when the items are going to be needed.

Types of Production Strategies

There are five common types of production planning strategies that many businesses use to help them determine the appropriate amount of a product to make. The strategy it uses depends on the industry of the business, its size, the types of products it produces and consumer demand. Here's a list of five types of production strategies to consider:

1. Chase strategy
2. Make-to-stock
3. Make-to-order
4. Assemble-to-order
5. Level production

Objectives of the Study

- To know the demand of bamboo product in Palghar District after Covid - 19.
- To know the Production level of bamboo product in Palghar District after Covid - 19.
- To know the ratio of demand and supply.
- To know the Production strategies used by bamboo base industry (craftsmen) to make bamboo after Covid - 19.

Research Methodology

The data needed for the study is collected from the bamboo craftsman through personnel interview using questionnaire.

Research Design

The study was based on survey method

Sampling Plan

1. Sample Method: Non-Probability Sampling (Convenience sampling)

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2. Sample Size: 100 Craftsmen.

Limitations of the study

Following points describe limitations of the present study:-

1. The study is limited to study the production strategies of Bamboo base industry only.
2. The study is limited to Palghar district only.
3. Sample size is limited due to time and money constraint.

Findings and Analysis

1. Types of products made from bamboo in the area

Basket	Kanga
Topla	Panjra
Supdi	Other

Interpretation: The above table shows the different types of bamboo based product produced in the area as per demand and order.

2. Use of the product

Product	Use for
Basket	Packing of Flowers
Topla	Packing of fruits - Chickoo & Jambu,
Supdi	House hold & Farming (During Harvesting) for separating dust from grains
Kanga	Farming (During Harvesting) & Storing grains , also used as wall & border of house in village
Panjra	For safety & shelter of Chicken & Duck as chicken coops

Interpretation: The above table shows the uses of different bamboo product for different purpose.

3. Demand of product season wise.

Product	Demand Seasonwise
Basket	All
Topla	Winter, Summer
- Chickoo Topla	Summer
- Jambu Topla	
Supdi	- During Ganpti Festival - During Harvesting
Kanga	During Harvesting
Panjra	All

Interpretation: The above table shows the demand of different bamboo product as per the season and occasions.

4. Gender wise Craftsman involved in the industry

Gender	Percentage (%)
Male	10%
Female	90%

Interpretation: The above table shows that there are 10 % male and 90% female involved in production of bamboo product.

5. Income from sale of bamboo product.

Answer	No. of respondent
Adequate	20
In adequate	80

Interpretation: The above table shows 20 respondent feels that income from sale of bamboo product is adequate and 80 respondent feels that income from sale of bamboo product is not adequate.

6. Demand of bamboo product during Covid – 19.

Answer	No. of respondent
Adequate	00
In adequate	00

Interpretation: The above table shows that there was no demand for bamboo product during Covid-19

7. Demand of bamboo product after Covid - 19.

Answer	No. of respondent
Adequate	65
In adequate	35

Interpretation: In the above table 65 respondent feels that there is adequate demand of bamboo product after Covid - 19.

8. Supply of bamboo product as per demand.

Answer	No. of respondent
Adequate	82
In adequate	18

Interpretation: In the above table 82 respondent feels that there is adequate supply of bamboo product as per the demand.

9. Strategies adopted for making bamboo product by craftsmen's.

Answer	Response
Chase strategy	Yes
Make-to-stock	Yes
Level production	No
Assemble-to-order	No
Make-to-order	Yes

Interpretation: The above table shows different strategies used by craftsmen for making bamboo products.

Findings

- Bamboo product which are produced in the study area are - Basket, Topla, Supdi, Kanga Panjra which are used for the purpose of packing of flowers & fruits, during harvesting activity, household and as a chicken coops.
- The production (making) of bamboo product is mostly carried out by females.
- They did not get professional training from any institution.
- The skill required for making bamboo product is transmitted from one generation to another.
- Most of the people in this occupation are illiterate and most of the families are under BPL.
- The rural communities have traditionally been using bamboo and the utilisation has been highly localized.
- The economic status of the craftsman is not so well because of low demand, lack of promotion and inadequate price of goods.
- The procedures are relatively labour intensive and performed with traditional devices that are of low technology and production capacities.
- The craftsmen's uses mix production strategies - Chase strategy, Make-to-stock, Make-to-order.

Suggestions & Recommendation

- Professional training must be provided to the craftsmen.
- New products must be added in their production line.
- Proper marketing of bamboo product needs to be done.
- Modern technology must be adopted.
- Production strategies used by the craftsmen for different product should be selected with care and must be implemented properly.

Conclusion

From the study it was identified that like other industry Covid-19 have also affected the bamboo base industry and livelihood of craftsmen in the study area. Hence after Covid -19 when life was on track and with the demand of bamboo base product the craftsmen have adopted mix Production strategies - Chase strategy, Make-to-stock, Make-to-order for producing the bamboo product and earn livelihood.

Conflict of Interest

There is no conflict of interest between the authors in this manuscript.

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