



Socio-Economic Status of Bamboo Artisans of Karnataka, India

Suprita Pawar^{a++*}, Geeta Chitagubbi^{a#}
and Rajeshwari Desai^{at}

^a Department of Family Resource Management, College of Community Science,
University of Agricultural Sciences, Dharwad, Karnataka-580005, India.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2023/v41i71935

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/98604>

Short Research Article

Received: 18/02/2023

Accepted: 21/04/2023

Published: 08/05/2023

ABSTRACT

Aim: To study the demographic profile and socio economic status of the bamboo artisans of Northern Karnataka districts.

Study Design: Exploratory design was used.

Place and Duration of Study: Study was conducted in Northern Karnataka districts of Dharwad, Belgavi and Uttar Kannada in the year 2019-2020.

Methodology: Random sampling method was applied to select a sample size of 120 bamboo artisans' family (Forty respondents from each district). The respondents were interviewed personally to elicit the primary information by using self structured interview schedule and Aggarwal et al. [1] was used to study the socio economic status of the bamboo artisans.

Results: The study resulted that bamboo artisan's belonged lower middle socio economic status. Higher per cent of the respondents belonged to middle age group followed by young age group. Women participation was more compare to men counterpart in the bamboo artisans occupation.

⁺⁺ Ph.D. Scholar;

[#] Professor;

[†] Assitant Professor;

*Corresponding author: E-mail: pawarsuprita1996@gmail.com;

Conclusion: Majority of the respondents belonged to middle age group, and majority of them were female followed by male. More than fifty per cent of the respondents had primary school level of education. Majority of the respondents were married followed by widow. Nearly fifty per cent of the respondents belonged to small family. Higher per cent of the respondents had less than 13 years of experience in the bamboo enterprise products making. More than half of the respondents spent 5-6 hours a day in bamboo enterprise. Majority of the respondents involved daily in bamboo enterprise work. Nearly fifty per cent of the respondents had habit of storing the bamboo raw materials inside the home. Majority of the selected bamboo artisans belonged to the lower middle socio economic status and were having less than 13 years of experience.

Keywords: Bamboo artisans; environmental development; non-timber forest product; socio-economic.

1. INTRODUCTION

Bamboo is used for a variety of reasons, it is essential to human existence on a daily basis and is used to build homes, create agricultural equipment, produce food, make weapons, etc. It supports a number of conventional cottage industries in addition to serving as an easy source of cellulose for the production of rayon and paper. One of India's oldest traditional cottage industries is bamboo craft. This rural craft dates back to the dawn of civilisation, when man first began to cultivate food crops thousands of years ago. The abundant bamboo that was found in the neighbouring forests was used to create baskets, mats, and a variety of other household goods. Currently, bamboo craft is widespread throughout the nation's rural areas and provides food for millions of traditional labourers.

"Handicrafts are things that are manufactured by hand, frequently using rudimentary tools, and are typically of an artistic or traditional nature. They include domestic products, jewellery, ornaments, and both functional and decorative objects. Handicrafts are defined as items manufactured by hand that may or may not have functional utility but have some artistic or decorative value under the import and export policy of the Government of India. The handcraft products' fundamental traits can also be understood. They are almost always produced using extremely labor-intensive techniques, giving low-income, low-wage nations a significant sense of comparative advantage in doing so.

The value placed on handwork for its own sake and the emphasis on distinct rational and ethnic talents provide artisans a competitive advantage even in the face of process and product innovation.

Thus, it is clear that handicrafts have the potential for relatively quickly expanding export

business while simultaneously generating job prospects due to the extensive utilisation of labour and local expertise. Handicrafts offer underprivileged social groups in many developing nations the chance to work. The majority of the Indian handicrafts industries are located in rural areas. These industries are India's second-largest source of employment for its citizens.

One of the top priorities is that these are giving rural residents who are from the weaker socioeconomic groups jobs. The Indian handicraft industries are primarily labor-intensive, and they play a significant role in helping the enormous population find work and maintain their financial security. Low capital investment handicrafts are manufactured by hand or with the aid of basic instruments in India's handicraft industries. In order to supplement their income, agricultural households have turned to handicraft as a secondary occupation when they are not working on their primary activity. Handicraft was first created as an independent rural activity that involved people from a class or community wholly or mostly.

1.1 Objectives

1. To study the general information of bamboo artisans
2. To examine the social economic status of bamboo artisans

2. REVIEW OF LITERATURE

2.1 General Information of the Bamboo Artisans

2.1.1 Age

Lynser et al. [2] revealed that majority (65.00%) of women belonged to the age group of 25 to 45 years who were involved in mat making followed

by 46 to 60 years of age group (18.00%) women involved in mat making and age group between 61 to 70 years were about seven per cent.

Kamrul and Nayeema [3] resulted that more than 56.00 per cent of the respondents were in 30-50 years of age group followed by 25.00 per cent belonged to age group of 15-30 years and only 19.00 per cent of the respondents ranged the age group 50 and above.

Nwaihu et al. [4] depicted that majority (57.78%) of respondents belonged to the age group of 51 and above years followed by 26.67 per cent were in the age group of 31-40 years, whereas 8.88 per cent belonged to 21-30 years and 6.67 per cent belonged to 41-50 years.

Kalanzi et al. [5] showed that 53.50 per cent of the respondents were in the age ranged between 36-60 years followed by 41.2 per cent between 18-35 years where as only 5.3 per cent belonged to the age group above 60 years.

Taiebur and Dhanonjoykumar [6] revealed that majority of the respondents (41.00%) belonged to the age group of 30 years followed by 29.50 per cent of the respondents were fall in 31-35 years of age group, and only 13.00 per cent of the respondents belonged to 36-40 years and 10.80 per cent of the respondents were in age group of 41-46 years, whereas only 5.80 per cent were belonged to the age group above 46 years.

2.1.2 Education

Kamrul and Nayeema [3] indicated that majority of the respondents (78.00%) had education level was below SSC (secondary school certificate) followed by 16.00 per cent of the respondents were graduated whereas only 4.00 per cent were post graduate.

Nwaihu et al. [4] revealed that maximum of the respondents (37.78 per cent) completed FSLC (first school leaving certificate) qualification followed by 35.56 per cent of respondents did O' level education, whereas 13.33 per cent of respondents were BSc graduate.

Paik [7] depicted that 70.00 per cent of the respondents (rope producer) were illiterate followed by 16.00 per cent of the respondents attended primary education whereas 6.67 per cent completed upper primary and only 5.33 per cent completed high school or college level of education.

Kalanzi et al. [5] resulted that 58.00 per cent of the respondents' attained primary education followed by 36.00 per cent were illiterate, while 5.00 per cent of the respondents completed secondary education and only 1.00 per cent of the respondents completed tertiary education.

Preetika and Amita [8] showed that 50.00 per cent of the artisans completed their education in masters followed by 37.69 per cent of the artisans were graduates whereas 9.05 per cent completed their qualification in doctorate, least (2.01%) were undergraduate and only 1.26 per cent had other education qualifications.

Tanusree [9] revealed that out of 100 respondents 52 respondents attended class between 5th -8th standard followed by 37 respondents attended their education till class 4th standard whereas 11 respondents had above 8th standard and higher education.

2.1.3 Marital status

Nwaihu et al. [4] depicted that majority of the respondents were married (76.00%) followed by 24.00 per cent of respondents were single.

Paik [7] resulted that major per cent of women were widow (78.00%) followed by 22.00 per cent were married.

Kalanzi et al. [5] revealed that majority of the respondents were married (90.40) followed by 9.60 per cent of the respondents were single.

Preetika and Amita [8] showed that majority of the artisans were single (49.75) followed by of the artisans were married (35.18 %), whereas 12.31 per cent of the artisans were divorced/widowed and whereas 2.76 per cent of the respondents did not answer.

2.1.4 Income

Hogarth and Belcher [10] depicted that bamboo was the second most important source of income (13.33%) after off-farm income (22%).

Kithan [11] resulted that 6000 mats were sold for Rs 50/- per mat producing monthly revenue of Rs.3 lakh.

Rabinjyotikhataniar [12] revealed that artisans can get profit if they produce sofa, up to Rs 22,900/- of income they can generate. Similarly the income Rs 18,750/- can be produced if they produce lamp and Rs 13,500/- income can be

generated if artisans produce flower stand respectively.

Anitakumari et al. [13] resulted that artisans got Rs 165 to 230 per day including their profit and wages. It showed that it has low income and it was time consuming also.

Richa and Rathna [14] revealed that majority of the respondents income was below Rs. 5000/- (44.00%) followed by income ranged between Rs. 6000-9000/- (27.00%), whereas 15.00 per cent of the respondents income ranged between Rs. 4000-5000. The income was not satisfied by the artisans to meet their daily needs. The main reason for the low income was there was lack of order and lack of local market.

Tanusree [9] showed that out of 100 respondents 35 person were having an income less than Rs 3000 per month, income group of 3000-6000 belong to moderate and only 6000 per month was earned by 12 persons.

2.2 Socio Economic Status of the Bamboo Artisans

Mohammed et al. [15] observed that men played a major role in the collection of raw material and products marketing followed by women. Women had a key role in the manufacturing of bamboo products.

Shakya et al. [16] resulted that the entrepreneurs suffered from the marketing channels and lack of information. And due to the lack of modern techniques and tools, the entrepreneurs hindered the growth of business in both quantitatively and qualitatively.

Akilandeswari and Pitchai [17] showed that the census method was used to check the production and majority of the artisans lived in a rented house (99.00%) followed by only 1.00 of the artisan lived in own house.

Seth [18] showed that the finding of social benefits revealed that the entrepreneurs had fulfilled their basic needs like having a mobile (82.60%) followed by giving education to their children (65.20%) whereas 56.50 per cent of them had a television. In economic benefits majority of them had an electric connection (65.20%) followed by water supply with sanitation (60.90%).

Sythud et al. [19] revealed that the bamboo was used everywhere and has a global presence. It

was used for many purposes from toothpick to dresses and construction of houses. So it was helpful for the rural people with proper skills to adopt the business to come out of poverty trap.

Pranab and Dillip [20] stated that cottage and village industries were important as it improves the economic status of the rural people.

Selvam [21] resulted that more than half of the respondents had a moderate level (61.60%) of social status and little more one fifth (22.10%) of the respondents had high level of social status. And an economic status majority of the respondents had moderate level of economic status (74.40%) followed by low economic status (16.30%). There is a significant and strong positive correlation between social and economic status for bamboo handicraft workers.

Muhammed et al. [22] revealed that bamboo was one of the important segments to improve the socio-economic status as it is divided broadly as household, weapons, industrial uses, medicines, construction, and agriculture tools. Things have to be done to improve the economy among artisans.

Preetika and Amita [8] showed that the majority of the artisans belonged to the high socio-economic status (43.97%) followed by 29.90 per cent of the respondents belonged to upper middle socio economic status whereas 16.08 per cent of the belonged to upper high and only 10.05 per cent belonged to lower middle socio economic status.

Rahim and Roszehan [23] resulted that majority of the respondents used bamboo for their own use (67.60%) followed by 34.40 per cent were used bamboo as source of income for socioeconomic status.

Rahman and Kumar [24] revealed that majority of the respondents said that it was not able to maintain their family expenditure (52.70%) followed by 47.30 per cent of the respondents thought that they were capable to maintain expenditure by struggling to get high income.

3. METHODOLOGY

The present investigation entitled 'Socio Economic status of Bamboo artisans and their problems' was carried out in the department of Family Resource Management, College of Community Science, University of Agricultural Sciences, Dharwad, during the year 2019-2020.

The materials and methods adopted for the present investigation are given under the following headings:

- Research Design
 - Type of Research
 - Variables of the study
 - Definitions and Operational Definitions
- Data Collection
 - Locale of the study
 - Selection of taluks and villages
 - Selection of respondents
 - Sampling procedure
 - Research tools and method of data collection
- Data Analysis
 - Coding
 - Categorization and Quantification of Variables
 - Statistical Analysis

3.1 Research Design

3.1.1 Type of research

The research design adopted for the present investigation was exploratory type.

'A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to research purpose with economy in procedure' (Joshi et al. 2013). Research design facilitates the smooth sailing of the various research operations in systematic manner.

3.1.2 Exploratory research

It is the research design for exploring, recording, analyzing and interpreting situations that exist in a selected environment. An exploratory study aims at gaining familiarity with phenomenon in order to understand it or achieve new insight into it.

3.2 Data Collection

3.2.1 Locale of the study

The study was conducted in three districts of Northern Karnataka viz., Dharwad, Uttar Kannada and Belagavi districts.

3.2.2 Selection of taluks and villages

3.2.2.1 Selection of taluk

One taluk from each district was selected.

3.2.2.2 Selection of villages

Two villages were randomly selected from each selected taluk in the study area.

3.2.3 Selection of respondents

Representative sample of 20 bamboo artisans were randomly selected from six selected villages of the study area. Thus the total sample comprises of 120 bamboo artisans including both women and men.

3.2.4 Sampling procedure

Keeping in view of the objectives of the study, random sampling technique was adopted. Totally 120 bamboo artisans families were selected for the study.

3.3 Categorization and Quantification of Variables

The data on selected independent and dependent variables were quantified and categorized as follows:

3.3.1 Age

Age was mentioned as the number of calendar years reported to have completed by the respondents at the time of survey. Based on the age the respondents were categorized as per the classification given by Usha Rani [25].

3.3.2 Marital status

Marital status was classified into three groups viz., married, unmarried and widow as per the classification given by Hiremath [26].

List 1. Age distribution

Category	Age	Score
Young	Up to 35 years	1
Middle	36-50 years	2
Old	Above 55 years	3

List 2. Marital status

Category	Score
Married	1
Unmarried	2
Widow	3

3.3.3 Type of family

Family type refers to three way classification of family as nuclear, joint and extended as per the classification given by Aggarwal et al. [1].

List 3. Variation among type of family

Category	Score
Nuclear family	1
Joint family	2
Extended	3

3.3.4 Family size

Family size refers to number of people living in the family and classified as small, medium and large by using Aggarwal et al. [1] scale as follows.

List 4. Family size distribution

Family size	No. of members	Score
Small family	3-4	1
Medium family	5-7	2
Large family	8 and above	3

3.3.5 Education

Education refers to the number of years of formal education completed by the respondents. Based on the education bamboo artisans were classified by using Aggarwal et al. [1] and the scores were given as follows.

3.3.6 Income

The respondents were classified into three categories based on the mean and standard deviation of the annual income of the total sample by using the formula, $\bar{x} \pm 0.425*SD$ as follows.

List 5. Educational score

Category	Score
Doctor, Eng. CA, MBA, etc	7
Post graduation	6
Graduation	5
10 th class pass but < graduation	4
Primary pass but <10 th	3
< Primary but attended school for at least one year	2
Just literate but no schooling	1
Illiterate	0

List 6. Income of respondents

Categories	Amount (annum)
Low	<13900/-
Medium	Rs 13900/- to 16300/-
High	> 16300/-

3.3.7 Years of experience

The bamboo artisans years of experience were classified into three categories based on the mean and standard deviation of total sample by using the formula, $\bar{x} \pm 0.425*SD$ as follows

List 7. Experience score

Category	Score
<13 years	1
13-19 years	2
>19 years	3

3.3.8 Working hours

The bamboo artisans working hours were classified into three categories based on the mean and standard deviation of total sample by using the formula, $\bar{x} \pm 0.425*SD$ as follows.

List 8. Working hours

Categories	Score
<5 hour	1
5-6 hour	2
>6 hour	3

3.3.8 Socio economic status

The socio economic scale of Agarwal, 2005 was referred to assign the scores for 22 components related to occupation, landholdings, caste, education, socio-political participation, and possession and housing conditions of selected families. The classification of the total socio-economic status scores of the sample according to Agarwal (2005) is mentioned below.

List 9. Socio economic status

Social status	Score
Upper high	≥ 76
High	61-75
Upper middle	46-60
Lower middle	31-45
Poor	16-30
Very poor or below poverty line	≤ 15

3.3.9 Storage space

The storage space of the bamboo artisans were categorized and scores given as follows

List 10. Storage space distribution

Storage space	Score
Inside home	1
Outside home	2
Separate workstation	3

4. RESULTS AND DISCUSSION

The general information of selected bamboo artisans is presented in the Table 1.

4.1 Age

Higher per cent of the respondents belonged to middle age group followed by young age group. Similar observation was made by Kamrul and Nayeema [3] in their study, which shows that 56.00 per cent of the respondents belonged to middle age group (30-50 years) followed by 25.00 per cent of the respondents belonged to young age group (15-30 years).

4.2 Gender

More than sixty six per cent of the respondents were female followed by male. The results are in line with study conducted by Preetika and Amita [8] indicating higher involvement of women in bamboo activities.

4.3 Education

More than half of the samples attended primary school followed by illiterate. The results coated by Kalanzi et al. [5] are similar that indicates majority of the respondents obtained primary education (58.00%) followed by illiterate.

4.4 Marital Status

Maximum per cent of the respondents were married followed by widow. These results are in par with the results of Nwaihu et al [4] which shows that 76.00 per cent of the women were married and 24.00 per cent of the respondents were single.

Table 1. General information of the selected bamboo artisans

			N=120
Sl. No.	Demographic variable	Frequency	Percentage
1	Age		
	Young (Up to 35 years)	48	40.00
	Middle (36-50 years)	52	43.34
	Old (Above 50 years)	20	16.66
2	Gender		
	Male	40	33.34
	Female	80	66.66
4	Education		
	Illiterate	53	44.17
	Primary school	63	52.50
	High school	4	3.33
	PUC	-	-
	Degree	-	-
	PG	-	-
5	Marital status		
	Married	85	70.83
	Unmarried	12	10.00
	Widow	23	19.17
6	Family size		
	Small(below 5)	58	48.34
	Medium(5-7)	46	38.33
	Large (more than 7)	16	13.33
7	Family type		
	Nuclear	73	60.83
	Joint	28	23.33

Sl. No.	Demographic variable	Frequency	Percentage
	Extended	19	15.84
8	Annual income in rupees		
	Low (<13900)	28	23.30
	Medium (13900/- to 16300)	56	46.70
	High >(16300)	36	30.00
9	Year of experience		
	Less than five years	-	-
	<13 years	73	60.83
	13-19 years	26	21.66
	>19 years	21	17.51
10	Time spent in hours		
	<5	-	-
	5-6	64	53.40
	>6	56	46.60
11	Frequency of involvement in activities		
	Daily	96	80.00
	Alternate days	20	16.70
	Fortnight	4	3.30
12	Bamboo storage space		
	Inside home	57	47.50
	Outside home	47	39.17
	Have separate storage space	16	13.33

Note- Multiple responses

4.5 Annual Family Income

Majority of the respondents belonged to medium level of income (13,900 to 16,300) followed by low income group (16,300/-) and high level of income group (13,900/-). Reasons may be that artisans work only during summer and they cannot work and sell their bamboo products during rainy season.

4.6 Time Spent in Bamboo Activities

More than half of the respondents spent 5-6 hours a day in bamboo enterprise followed by 6 hours. The results are contradictory with the results of Richa and Rathna [14] where fifty per cent of the artisans worked for 6-8 hours followed by 27.00 per cent of the artisans worked for 4-6 hours.

4.7 Frequency of Performance in Bamboo Activities

Maximum per cent of the respondents involved daily in bamboo enterprise work (80.00%) and only 16.70 per cent were involved alternate days in activities of bamboo enterprise. This is due to

bamboo enterprises being the main occupation for their livelihood.

4.8 Bamboo Storage Space

Nearly fifty per cent of the respondents had habit of storing the bamboo raw materials inside the home (47.50%) and 39.17 per cent of the respondents stored bamboo outside the home. Least per cent (13.33%) had separate storage space. Reasons maybe lack of separate storage place for bamboo work because artisans belonged to lower middle socio economic status.

4.9 Socio Economic Status of Selected Bamboo Artisans (Table 2)

Majority (70.83%) of the bamboo artisans belonged to the lower middle socio economic status followed by poor socio economic status (29.17 %). None of the respondents belonged to upper high, high and very poor socio economic status. Comparable study was made by Selvam [21] in which he found that majority of the respondents belonged to the moderate level of socio-economic status whereas 12.80 per cent of them belonged to the low level of socio-economic status.

Table 2. Socio economic status of selected bamboo artisans

N=120			
Sl. No.	SES level	Frequency	Percentage (%)
1	Upper high (>76)	-	-
2	High (61-75)	-	-
3	Upper middle (46-60)	-	-
4	Lower middle (31-45)	85	70.83
5	Poor (16-30)	35	29.17
6	Very poor or below poverty line (<16)	-	-

5. CONCLUSION

Majority of the respondents belonged to middle age group, and majority of them were female followed by male. More than fifty per cent of the respondents had primary school level of education. Majority of the respondents were married followed by widow. Nearly fifty per cent of the respondents belonged to small family. Higher per cent of the respondents had less than 13 years of experience in the bamboo enterprise products making. More than half of the respondents spent 5-6 hours a day in bamboo enterprise. Majority of the respondents involved daily in bamboo enterprise work. Nearly fifty per cent of the respondents had habit of storing the bamboo raw materials inside the home. Majority of the selected bamboo artisans belonged to the lower middle socio economic status and were having less than 13 years of experience.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Aggarwal P, Bhasin K, Chhabra, Aggarwal K, Rajoura P. A new instrument (scale) for measuring the socio demographic variables of the study: A preliminary study. *Ind. J. Comm. Med.* 2005;34(4):111-114.
- Lynser B, Tiwari K, Nongbri B, Kharlyngdoh E. Bamboo mat making and its contribution to the rural livelihood of women in South Meghalaya, India. *J. Am. Bamboo Soc.* 2014;28(1):1-9.
- Kamrul H, Nayeema N. Socio-economic status and current business situation of cane based furniture entrepreneurs in Bangladesh: An empirical study. *J. Bus. Technol.* 2015;10(1):94-108.
- Nwaihu C, Egbuche T, Onuoha N, Ibe E, Umeojiakor O, Chukwn O. Socio economic importance and livelihood utilization of bamboo (*Bambusa vulgris*) in Imo state Southeast Nigeria. *Agric. For. Fish.* 2015;4(3-1):81-85.
- Kalanzi F, Mwanja C, Agaba H, Guuroh T. Potential of bamboo as a source of household income in South Western Uganda. *J. Bamboo Rattan.* 2018;16(1):393-397.
- Taiebur R, Dhanonjoy Kumar. Problems and prospects of cottage industry in Khulna division of Bangladesh: An empirical assessment. *J. Bus. Manage.* 2018;20(6):45-52.
- Paik K. Grass for grassroots artisans-a study on artisans economic dependency on sabai grass (*Eulaliopsis binata*) in the backward region of West Bengal. *Int. J. Adv. Soc. Sci. Human.* 2016;4(12):41-48.
- Preetika G, Amita W. Impediments faced by artisans of Rajasthan in trading handicrafts in urban haats. *Int. J. Appl. Home Sci.* 2018;5(2):327-333.
- Tanusree R. Intangible heritage of bamboo and cane crafts is in stake: A study of selective blocks of Malda. *Int. J. Scien. Res. Eng. Develop.* 2019;2(4):451-455.
- Hogarth J, Belcher B. The contribution of bamboo to household income and rural livelihoods in a poor and mountains county in Guangxi, China. *Int. For. Rev.* 2013;15(1):71-81.
- Kithan N. Socio-economic Importance of Bamboo among the Nagas of Nagaland. *J. Hum. Ecol.* 2014;48(3):393-397.
- Rabinjyoti Khataniar. Cane and bamboo based industrial cluster in Assam-profitability and vulnerability. *Int. J. Human. Soc. Sci. Inven.* 2017;6(11):05-09.
- Anitakumari B, Thakur MK. Socio-economic status of forest-based rural artisans in mid-hill zone of Himachal Pradesh. *Int. J. Farm Sci.* 2019;9(2):103-108.
- Richa S, Rathna K. Socio-economic status of bamboo artisans: A case study of

- Bahriach and Gorakhpur districts, Uttar Pradesh, India. *Int. J. Biol. Res.* 2019;4(3): 79-83.
15. Mohammed A, et al. Role of bamboo-based cottage industry in economic upliftment of rural poor of Chittagong, Bangladesh. *J. Bamboo Rattan.* 2007;4(3):157-164.
 16. Shakya B, Sangeeta R, Das N. Socio-economic impacts of bamboo enterprises in the mid-hills of Nepal: A case study on Pahari community at Badikhel Village, Lalitpur. *J. For. Inf.* 2012;22(2):11-18.
 17. Akilandeswari V, Pitchai C. Upliftment of bamboo artisans as entrepreneur in Dindigul district. *Ind. J. Appl. Res.* 2014;4(11):331-333.
 18. Seth B. Socio-economic benefits of bamboo-craft entrepreneurship: The case of rinconada bamboo entrepreneurs. *Asia Pacific J. Multidis. Res.* 2015;3(5):172-177.
 19. Sythud P, Zhang Y, Mukete B. Bamboo resources utilization: A potential source of income to support rural livelihoods. *Appl. Ecol. Environ. Sci.* 2015;3(6):176-183.
 20. Pranab M, Dillipkumar D. Handicraft promotion vis-à-vis tourism development: A study on Bankura district, West Bengal. *Remark.* 2016;2(12):11-16.
 21. Selvam T. Socio economic status of bamboo handicraft workers. *Indo-Asian J. Multidis. Res.* 2016;2(5):770-774.
 22. Muhammed U, Vijayaraghavan P, Aneesh K. A study on importance of bamboo industry in the State of Kerala. *Int. J. Human. Soc. Sci. Inven.* 2017;6(11):43-46.
 23. Rahim, Roszehan I. Importance and uses of forest product bamboo and rattan: Their value to socioeconomics of local communities. *Res. Bus. Soc. Sci.* 2018;8(12):1484-1497.
 24. Rahman T, Kumar D. Problems and prospects of cottage Industry in Khulna Division of Bangladesh: An empirical assessment. *J. Bus. Manage.* 2018;20(6): 45-52.
 25. Usha R. A study on opinion of women beneficiaries towards DWCRA and benefits derived in Vizianagaram district, Andhra Pradesh. M.Sc. (Agri). Thesis, Univ. Agric. Sci. Dharwad, Karnataka (India); 1999.
 26. Hiremath S. Impact of distance education on nutrition. M. H. Sc. Thesis, Univ. Agric. Sci. Dharwad, Karnataka (India); 2019.

© 2023 Pawar et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/98604>