

## Assessing the socio-economic correlates for analyzing the benefit-cost ratio of cane and bamboo handicraft in Assam, India

M. M. ADHIKARY, K. PRADHAN<sup>1</sup> AND R. SAHARIA

Department of Agricultural Extension, Bidhan Chandra Krishi Viswavidyalaya,  
Mohanpur- 741252, Nadia, West Bengal

<sup>1</sup> Uttar Banga Krishi Viswavidyalaya, Pundibari -736165, Coochbehar, West Bengal

### ABSTRACT

The 'entrepreneurship development' is becoming global phenomenon today not only because of industrial growth and business ventures but also a solution of unemployment and for the socio-economic prosperity of the community. The present study was conducted at Pub Nalbari Block of Nalbari District and Balipara Block of Sonitpur District under the state of Assam with a view to assess the socio economic correlations for characterizing the benefit cost ratio of handicraft enterprises. The purposive as well as simple random sampling technique was adopted for the present study. The District and Blocks were purposively selected for the study. The District Nalbari and Sonitpur and the Blocks Pub Nalbari and Balipara were considered. Under Pub Nalbari Block, out of ten gaon panchayats, two gaon panchayats and in case of Balipara Block, out of eighteen gaon panchayats, two gaon panchayats were randomly selected for the study. The hundred handicraft entrepreneurs were selected randomly as respondents from the selected gaon panchayats for the purpose of final data collection. The data were collected with the help of structured interview schedule prepared for the study. The selected data were subjected to the statistical tools like coefficients of correlation and multiple regressions for drawing conclusions. The study revealed that entrepreneurs are getting good returns from cane and bamboo enterprises and the particular enterprise is economically feasible. Increase of annual income, increases the level of profit from the enterprise. The involvement of cost is lower than the profit gain from the enterprise. The experience of the entrepreneurs about the enterprise contributes to the efficient use of existing resources in the enterprise with the help of low cost technological intervention for profit maximization. The increased level of hired labour increases the benefit-cost ratio and one entrepreneur can maximize his profit by hiring the skilled labour from outside.

**Key words:** Entrepreneurship development, handicraft enterprise, industrial growth, skill labour, technological intervention.

The concept of 'entrepreneurship development' is becoming global phenomenon today not only because of industrial growth and business ventures but also a solution of unemployment and for the socio-economic prosperity of the community. In case of handicraft, craft forms a significant sector in India, not only because of their intrinsic cultural and aesthetic value but also because of their promising potential for economic development. An entrepreneurship development process is a judicious blend of management and risk orientation process for profit maximization.

The spirit of entrepreneurship development is quite old and plays an important role in the development of people economically and helps in solving the unemployment situation in the society. It is useful in the promotion of industrial growth and business ventures and also for the socio-economic prosperity of the community. It generates large-scale employment with relatively low capital, promotes more equitable distribution of national income and makes use of untapped capital and human skills. The craft or handicraft sector is the largest decentralized and unorganized sector of the Indian economy and is among India's largest foreign exchange earners (Vijayagopalan, 1993). As a socio-economic group, artisans are amongst the poorest. Creation of employment through indigenous crafts tradition is believed to be a productive source of income (Harper,

2000). After independence, on the recommendation of Ford Foundation team in 1953-54, four regional institutions were set up to impart training in, Advances in Science, Technology, Business and Management etc. Subsequently, Small Industries Development Organization (SIDO) took up this work of Entrepreneurship Development Programmes (EDP) which covered the first generation entrepreneurs including some of the rural areas of our country. The number of new jobs created by craft industries was almost as large as the number created by the private and public sectors combined (Pye, 1988).

The current state of India's artisans is a matter of serious concern. Those producing the craft reap the fewest benefits from the lucrative market and even the most talented often live in object poverty. Although most producers in India are highly skilled and many are true artisans, the vast majorities are poorly educated and have low social status. Firstly, this sector in India is lagging in efficient appropriation of its potentiality and is struggling to reach the production and export possibility frontier. Secondly, there is a dearth of information flow among the participants in the market of handicraft products. To boost up this sector, the Handicrafts and Handlooms Export Corporation (HHEC), was set up in June 1962 with the twin objectives of i) Export promotion and ii) Trade development of handicraft and handloom products. In such a research niche, the

economic attributes for characterizing the benefit-cost ratio of the handicraft enterprises in Assam.

## MATERIALS AND METHODS

The present study was conducted at Pub Nalbari Block of Nalbari District and Balipara Block of Sonitpur District under the state of Assam. The purposive as well as simple random sampling technique was adopted for the present study. It is termed as multi stage random sampling procedure. The District and Blocks were purposively selected for the study. The District Nalbari and Sonitpur and the blocks Pub Nalbari and Balipara were considered. Under Pub Nalbari block, out of ten *gaon panchayats*, two *gaon panchayats* and in case of Balipara block, out of eighteen *gaon panchayats*, two *gaon panchayats* were randomly selected for the study. An exhaustive list of respondents was prepared with the help of block and panchayat officials from the selected four *gaon panchayats*. From the prepared list, 100 respondents were selected randomly for the purpose of final data collection. A pilot study was conducted in the selected *gaon panchayats* before constructing the data collecting schedule. In course of this survey informal discussion was carried out with some rural entrepreneurs and extension agents of the localities. For the present study the variables, viz. age, education, organizational pattern, annual income,

family type, experience, source of finance, source of labour, training exposure were considered as predictor variables and benefit-cost ratio, management orientation, risk orientation and performance of the enterprise were considered as predicted variables. The data were collected with the help of structured schedule prepared for the study after the pilot survey through the process of interview. The selected data were subjected to the statistical tools like coefficients of correlation and multiple regressions for drawing conclusion.

## RESULTS AND DISCUSSION

Table 1, presents the average value, standard deviation and the coefficient of variation of the causal and dependent variables namely age, education, organization pattern, annual income, family type, experience, source of finance, source of labour, training exposure and benefit-cost ratio.

Table 2, presents the coefficient of correlation of benefit-cost ratio with the nine causal variables. The table reveals that annual income ( $x_4$ ), experience ( $x_6$ ) and source of labour ( $x_8$ ) variables are positively and significantly associated with the benefit-cost ratio. The variable family type ( $x_5$ ) is negatively and significantly associated with the benefit-cost ratio.

**Table 1: Average value of the causal and dependent variables**

Variables	Mean	Standard deviation	Coefficient of variation(C.V.)
Age ( $x_1$ )	43.2100	8.9390	20.687
Education ( $x_2$ )	3.9900	0.7977	19.992
Organization pattern( $x_3$ )	4.8800	0.3266	6.692
Annual income ( $x_4$ )	76660.0	18099.7	23.610
Family Type ( $x_5$ )	1.3000	0.4606	35.430
Experience ( $x_6$ )	9.4300	4.5422	48.167
Source of finance( $x_7$ )	2.2100	0.7823	35.398
Source of labour ( $x_8$ )	1.7400	0.4408	25.333
Training exposure( $x_9$ )	1.4600	4.1546	284.561
Benefit-cost ratio ( $y$ )	22.4658	1.3701	6.098

**Table 2: Correlation coefficient of benefit-cost ratio (Y) of the enterprises along with nine causal variables**

Variables	Correlation Coefficient (r)
Age ( $x_1$ )	0.0123
Education ( $x_2$ )	0.0025
Organization pattern ( $x_3$ )	-0.1336
Annual income ( $x_4$ )	0.4823 **
Family type ( $x_5$ )	-0.2711**
Experience ( $x_6$ )	0.2949 **
Source of finance( $x_7$ )	-0.0870
Source of labour ( $x_8$ )	0.3806 **
Training exposure( $x_9$ )	-0.0524

\*Significant at 5% level of significance and \*\* Significant at 1% level of significance

Annual income of the family indicates the earning of the family from his main enterprise. The analysis reveals that increase of annual income increases the level of profit from the enterprise. The involvement of cost is lower than the profit gain from the enterprise. The profit actually contributes to the annual income of the family. As a result the variable annual income is positively and significantly correlated with the benefit-cost ratio of the enterprise.

The experience of the respondent of the enterprise contributes to the efficient use of existing resources in the enterprise with the help of low cost technological intervention for profit maximization. As a result the experience of the respondent has been positively and significantly associated with the benefit-cost ratio.

Source of labour is classified into two groups in this study. These groups are hired and non-hired groups. From the result, it is clear that the increased level of hired labour increases the benefit-cost ratio. An entrepreneur can maximize his/her profit by hiring the skilled labour from outside. The non-hired labours are not so much skillfull for maximizing the profit in that particular enterprise or they are not in abundance for giving same type of output as compared to that of the hired labours in the enterprise. As a result, the variable source of labour is positively and significantly correlated with the benefit-cost ratio.

The variable family type has been classified into two groups. One is nuclear and another is joint family. In case of joint family the consumption of goods for maintaining livelihood is coming from the entrepreneur's main enterprise. But incase of nuclear

family the consumption is less than the joint family. As a result, the profit is going much more to the joint family than the nuclear family for maintaining their livelihood. As a result, the variable family type is negatively and significantly correlated with the benefit-cost ratio of the enterprise.

Table 3, presents the multiple regression analysis of benefit-cost ratio of the enterprise with the nine causal variables and the result reveals that annual income and experience of the entrepreneur have recorded a significant regression effect on benefit-cost ratio in presence of other causal variables. The annual income had contributed the highest direct effect in delineating the benefit-cost ratio of the enterprise followed by the variable experience of the entrepreneur. The annual income of the entrepreneur indicates the higher risk taking ability, capital investment in an enterprise, knowledge sharing for technological intervention to maximize the profit of the enterprise. That is why this variable has been found wielding substantive effect in the benefit-cost ratio. The experience of the entrepreneur had also recorded a significant substantive impact on the benefit-cost ratio of the enterprise. The experience profile of an entrepreneur exposes to an interactive milieu along with diverse surroundings and events. It helps in building up management orientation desire and destiny to maximize the profit of his enterprise. That is why this variable has been found a significant regression effect in characterizing the benefit-cost ratio of the enterprise in presence of the other predictor variables.

**Table 3: Multiple regression analysis of benefit-cost ratio (Y) of the enterprises along with nine predictor variables**

Variables	Standardized regression coefficient (β)	β×R	Regression coefficient (b)	Standard error of 'b'	't' value
Age (x <sub>1</sub> )	-0.198	-0.112	-0.030	.021	-1.448
Education (x <sub>2</sub> )	-0.042	-0.023	-0.071	.232	-.310
Organization pattern (x <sub>3</sub> )	-0.034	-.019	-0.142	.411	-.345
Annual income (x <sub>4</sub> )	0.313	0.177	0.00002	.000	2.528**
Family type (x <sub>5</sub> )	-0.080	-0.045	-0.238	.296	-.804
Experience (x <sub>6</sub> )	0.298	0.169	0.089	.044	2.067*
Source of finance(x <sub>7</sub> )	-0.169	-0.095	-0.296	.208	-1.428
Source of labour (x <sub>8</sub> )	0.104	0.059	0.322	.388	.829
Training exposure(x <sub>9</sub> )	-0.110	-0.062	-0.036	.034	-1.078
<b>R<sup>2</sup> = 0.322</b>					
<b>Adjusted R<sup>2</sup> = 0.255</b>					

\* Significant at 5% level of significance \*\* Significant at 1% level of significance

The  $R^2$  value being 0.322 means the predictor variables put together 32.20% of the variations embedded in the predicted variable, benefit-cost ratio has been explained and the 67.8% of variation in predicted variable still has been left unexplained. On the basis of that this should further suggest that inclusion of more relevant and contextual variables could have explained more variation in predicted variable.

For sustaining any enterprise in the long run determining the cost benefit ratio is important and profit is the ultimate goal of an entrepreneur. This benefit-cost ratio is the ratio between the profit coming from the enterprise and the cost involved in the enterprise in rupees annually. The study revealed that majority of the entrepreneurs are getting good return from this cane and bamboo enterprise and the particular enterprise is economically feasible. In highlighting the benefit-cost ratio, some of the variables like annual income, experience and source of labour found significant association with the benefit-cost ratio. Increase of annual income increases the level of profit from the enterprise. The experience of the respondent above the enterprise contributes to the efficient use of existing resources in the enterprise with the help of low cost technological intervention for profit maximization. The increased level of hired labour increases the benefit cost ratio and one entrepreneur can maximize his profit by hiring the skill labour from outside.

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