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Perceived Usefulness of Banana Pseudostem Processing and Value Addition among Farmers in Coimbatore District of Tamil Nadu

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ABSTRACT

This study has been carried out to assess the perceived usefulness of Banana Post Production Mechanisation among farmers in the western region of Tamil Nadu. Coimbatore district was selected because banana cultivating farmers are more in this region and two taluks namely Coimbatore and Mettupalayam were selected at random. From each taluk, 2-3 villages were selected on cluster basis. In each cluster, 15 respondents were selected for research intervention. Thus, in total, 60 respondents were selected for this study. Attributes of Mechanization had been employed through package of banana pseudostem processing equipment and banana rope making equipment among respondents, where the highest mean score was reported in Economic viability.

Keywords: *Perceived Usefulness; Banana Post Production Mechanisation;Rural farmers; Tamil Nadu*

India is the world's largest banana producer with an annual output of 24.8 million tonnes. Banana contributes 37% to total fruit production in India. Over 90% of bananas produced in India are consumed domestically as fresh fruit. And it is estimated that processing in banana is only to an extent of 2.5% of which about 1.80% is used to process banana chips. The rest is processed into banana puree, banana pulp, banana beer, banana powder and so on.

If farmers adopt new technologies or value addition techniques like drying and processing their products it will not only improve the quality but also minimize post-harvest losses whilst increasing their income. Developing value added products from banana pseudostem is restricted mainly to fibre extraction and handicraft making at national level. After harvesting of fruits and leaves, pseudostem is cut near to the ground level and its yield ranges from 60 to 80 t/ha. Fibre extraction from pseudostem is being done mostly by hand extraction in villages of Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and Maharashtra with extremely poor fibre output (0.5 kg/day/man) (Muigai et al, 2021).

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There should be efforts by scientists and technologists to prepare banana bio-products which will contribute in improving the livelihood of rural farm men/women. With this background, the present study was conducted to determine the perceived usefulness on banana processing & value addition and to study the operational skill assessment in adoption of the technology among the respondents.

METHODOLOGY

Purposive sampling design was employed for selecting the district (Coimbatore) as banana cultivating farmers are more in this region. Subsequently, two taluks namely Coimbatore and Mettupalayam were selected randomly and from each taluk, 2-3 villages (Pannimadai, S.Pungampalayam, Karamadai) were selected on cluster basis. From the selected cluster villages, 15 respondents were selected for research intervention. Thus, in total, 60 respondents were selected for this study. The primary data were collected from the respondents by personal interview with the help of interview schedule. The collected data were scored, compiled, tabulated and analyzed using appropriate statistical tools to draw rational and meaningful conclusions.

FINDINGS AND DISCUSSION

Socio economic Characteristics of the Respondents

Majority of the respondents (40.0 per cent) belonged to 'young' group followed by middle aged group (36.70 per cent) and 23.30 per cent of the respondents were in 'old age' category. Educational status of the respondents shows that, 26.67 percent had collegiate education followed by primary and middle school education. In the study area majority of the respondents (36.70 per cent) were engaged in agriculture along with service sector as their occupation. Majority of the respondents (93.3 percent) belonged to medium income category and only 6.70 percent were in high income group. Majority of the respondents were marginal farmers (30.00 percent) and landless farmers (30.0 per cent). Majority of the respondents had high level (more years) of farming experience (40.0 percent). Among the sample respondents, 60.00 percent had medium level of extension agency contact. About 90.00 per cent of the respondents had low level of social participation.

Table 1. Operational Skill Assessment of Banana Processing Equipment

(n=60)

Sl.No.	Operational Attributes	Mean score	Rank
1	Experience in Machine Operation	70.86	VII
2	Knowledge of Processing Procedures	81.66	II
3	Ability to Read Blueprints, Schematics and Manuals	84.52	I
4	Analytical/learning Skills	79.08	IV
5	Attention in trouble shooting	77.57	V
6	Teamw ork	79.36	III
7	Physical Stamina and Strength	72.94	VI
8	Work Independently	64.33	VIII

The respondents were assessed for their operational skill assessment of banana processing equipment and the results are provided in Table 1.

From the table, the highest mean score of 84.52% was found in 'ability to read blueprints, schematics and manuals' and lowest score (64.33%) was in 'work independently'. The respondents could get experience in rope making machine which is a feasible option in Ministry of Micro, Small and Medium Enterprises (MSME) to generate gainful employment and asset creation.

Usefulness of Processing and value addition

Majority of the famers are accepting that banana post production is an efficient technology for improving the banana product value.

Table 2. Perceived Usefulness of Banana Processing and Value addition

(n= 60)

Sl.No.	Attributes	Percentage
1.	Efficiency	74.24
2.	Technology Feasibility	78.43
3.	Economic viability	82.67
4.	Immediacy of Return	74.82
5.	Relative Advantage	73.90
6.	Multipurpose Usage	64.48
7.	Physical Compatibility	67.54
8.	Observability	72.86

It could be seen from Table 2 that, the highest mean score (82.67%) was found in 'economic viability' and lowest score, (64.48%) was found in multipurpose usage. An entrepreneur is always keen in obtaining sustainable income from microenterprises. Other attributes like 'efficiency of the equipment' compared to manual method, immediacy of return also show higher mean score which implies the banana processing technologies may operate in an enterprise mode in banana growing areas. The respondents showed keen interest in rope making machine for Self Help Group (SHG) members as viable option in enterprise mode provided developmental agencies support for their self-employment.

The products manufactured from banana fibre or other parts of banana could survive in market with value addition. Therefore, scientists and technologists should create banana bio-products awareness which in turn will contribute in improving the livelihood of rural farm men/women.

REFERENCES

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