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Banana House Hold Products Development and Endorsement Out of Its Strand

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ABSTRACT: Banana fibre is nature bast fibre which has wide range of uses in handicraft product development such as mat, rope and twines, but only 10% of its pseudo stem is being used for making products and remaining is waste or used as fertilizer .As it has a property like weather proof, UV protection (because of lignin content), moisture absorption ,anti-oxidant and bio degradable etc., it can be used to make variety of products that help farmers economically and have wide scope to create new market. Recent studies have indicated banana fibre possesses a lot of advantageous physical and chemical properties which can be used a very good raw material for the textile and packaging industry.

KEYWORDS: Banana Fibre, Bio Degradable, Value Addition, Weather Proof, Packaging Material.

I. INTRODUCTION

Banana is rightly called Kalpataru, a likening to an ancient fruit cultivated all over the world. India is the world's largest banana producer with an annual output of 24.8 million tonnes followed by China, Philippines, Ecuador and Brazil. India accounts for 22 per cent of the global banana production. Apart from providing textiles, banana fibre production provides employment opportunities to thousands of poor people in India. Bananas are harvested two to four times a year and the stems are usually cut and thrown away as waste. Banana fibre is also a major substitute to the pulp industry.

1.1 Banana

The bananas or the plantains are essentially hot climate plants. Their original home is said to be the tropical forests of Asia. The two terms banana and plantain are used synonymously in this country. Strictly speaking the former should be used for table varieties and the latter should be used for cooking varieties. Banana has an important place in our mythology. It is said that Manu or Noah (according to Western mythology) or Hazrat Nuh (according to Muslims) when starting to implant new life on our planet after the great flood, sought help from God for a multipurpose plant that will give us multivitamin fruit, vegetables for cooking, besides meeting most of our other demands. It is said that God gave him banana tree which meets most of our wants, since besides fruit and vegetable, flowers and stems are cooked, the plant gives fibre for manufacturing textiles, its leaves are used as plates to serve food besides of course many medicinal virtues. The plant grows easily of its own as it sets young shoots.

Botanically they are known as *Musa Paradisiaca*, *Musa Sapientum*, *Musa Cavendishii* and *Musa Chinensis*

All varieties of banana trees abound in fibres. In fact almost each and every part of this plant gives fibres of various strength, colour, beauty and staple length thus, can be used for various purposes. In the leaf sheaths, coarse and strong fibres are found on the outer ones, fine and silky in the inner most ones and those of the middling quality in the intermediate ones. The core, from the roots to the point of its emergence from the covering of the false stem contains an extremely white fine fibre. The fruit stems contain fibres of a rough variety, while the midribs of the leaves yield a fibre of exceptional strength and durability when properly processed.

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1.2 Objectives

- 1) To produce Household Products out of the Banana Strands of Fibres.
- 2) To Impact and develop new products from banana fabric for home textile.
- 3) To create new shop on the name VASUBANANA HOUSEHOLD PRODUCTS.
- 4) To make a clear cram and survey on banana house hold products.
- 5) To incenses the medical sense towards and ecofriendly house hold product.

II. RELATED WORK

2. Review of literature

2.1. Introduction of Banana Fibre

The usage of banana fibre for textile purposes predates written history. The evidence of this can be found in epics like Ramayana where Sita and Rama wore "Naravastra" clothes made from banana fibres. Not only in India but also references the of the history reveal that the banana fibre cloth was made around 13th century in Japan. Japan's currency, the Yen, is made out of banana fibre. They used to produce fibres of different softness and fineness that yield yarn and textile with different qualities for specific use in olden days extracted fibre was used for making rugs, ropes and for tying flowers.

Philippines and Japan are the countries using banana fibre on large scale for commercial banana fibre to Japan, Singapore, East Asian countries. Demand for textiles and readymade garments is increasing in India with increase in population and spending power. According to article research it indicates that a billion tonnes of banana plant stems are wasted every year. According to the Philippine Textile Research.

2.2 Origin of Banana Fibre.

References of the history reveal that the banana fibre cloth was made around 13th century in Japan. The Japanese word bashōfu literally means 'banana-fibre cloth'. Both the cloth and the clothing made from it are now considered important constituents of Okinawan identity. This special trait of Okinawan material culture was brought to attention by the Japanese Folk Craft Movement in the 1930s.

After years of decline following World War II, the weaving and use of bashōfu saw a revival that accelerated after the return of Okinawa to Japan in 1972 and still continues. Although its origins and history had remained hidden



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2.3 Banana products

- Paper
- Textiles
- Shoes
- Furniture
- Bags
- Baskets
- Rugs and mats
- Gloves
- Pillow
- Mask
- Floor mat
- vase

III.TEXT INPAINTING

3. METHODOLOGY

3.1. Research Design

expansion of banana fibre clothing and products developed from waste of banana plants which is bio degradable Explanatory research is followed .

3.2. Research Methodology

- Data collection is done by qualitative and quantitative research methodology.
- Qualitative research Unstructured interview was conducted for data collection based on the secondary research data.
- Quantitative research close-ended questionnaire survey was conducted to understand consumer knowledge about banana fibre clothing.

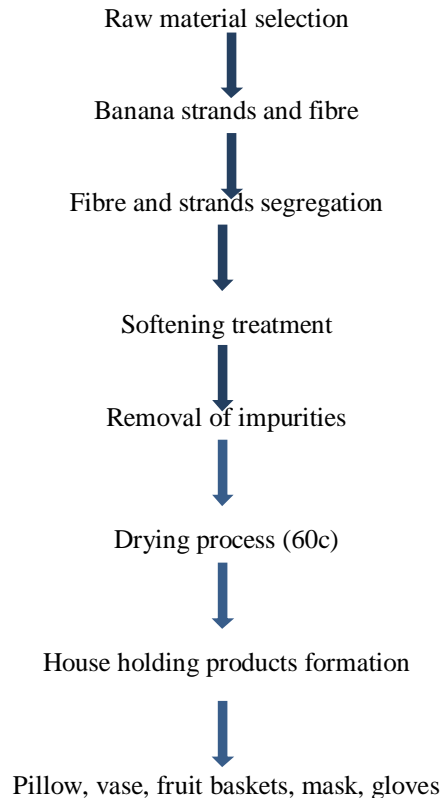
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3.3. Material and Methods



IV. EXPERIMENTAL RESULTS

4. RESULTS AND DISCUSSION

4.1. Banana Packaging

The research examined the green packaging development from banana fiber for instant food products. The purposes were to construct, approve and develop the sketch design, to develop banana fiber package prototypes that protect food products inside, to eliminate packaging environment problems, prevent natural resource and save energy in package processing, and to design packaging for instant banana food products such as packages such as stand-up pouch, paper box, paper cup, and zip lock paper bag. The research was found that Satisfaction of every factor was good level and every packaging pattern conformed to the identity design in structural and graphical packaging. As a result of studying structural packaging factors, it indicated factors that had excellent satisfaction level in every packaging pattern, were packaging with aesthetic and elegant ones, identity packaging and souvenir packaging. The development of green packaging from banana fiber for instant food products. Variables studied in this issue, packaging design of green packaging from banana fiber for instant food products of the envelope (Stand-up pouch), box (Paper Box), paper cups (Paper Cup), paper bags (Zip Lock Paper Bag). In this research, banana fiber used to produce packaging to select the quality of the physical, chemical and consumer product safety. Packaging is recycling-based that is eco-friendly disposal.[18]

After completion of product development, to find out the results a questioner was prepared and the results are found, it was found for each style. Data were analyzed opinions by the statistical package for the social science program and using mean, percentage and standard deviation.

- 4.50 to 5.00 - very good.

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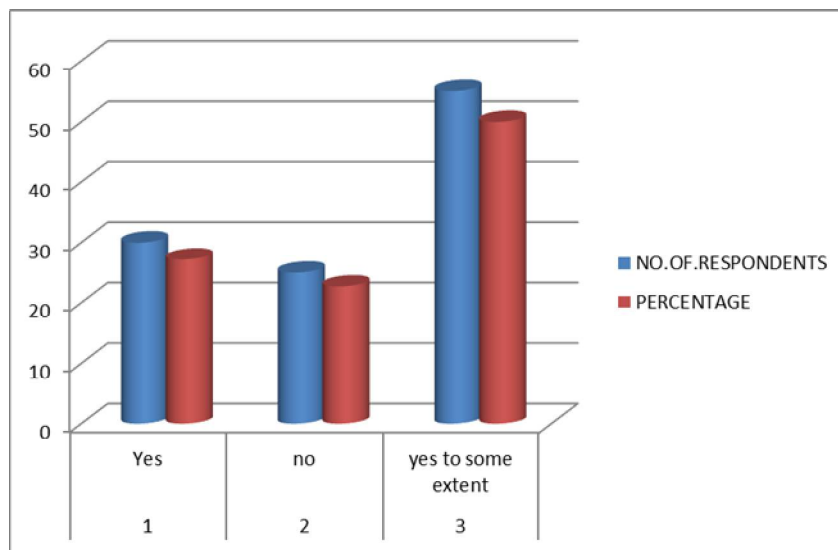
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- 3.50 to 4.49 – good
- 2.50 to 3.49 – medium
- 1.50 to 2.49 – less
- 1 to 1.49 – least

1. Do you think the banana fabrics are needed?

S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENTAGE
1	Yes	30	27.2
2	No	25	22.7
3	Yes to some extent	55	50
4	No to some extent	–	–



INFERENCE

It is inferred that 27% of the respondents feel that banana fibre is needed, 23% of the respondents feel that banana fibre is not needed, and 50% feel that banana fibre is needed to some extent.

2. Would you wear banana fiber clothing if it was readily available?

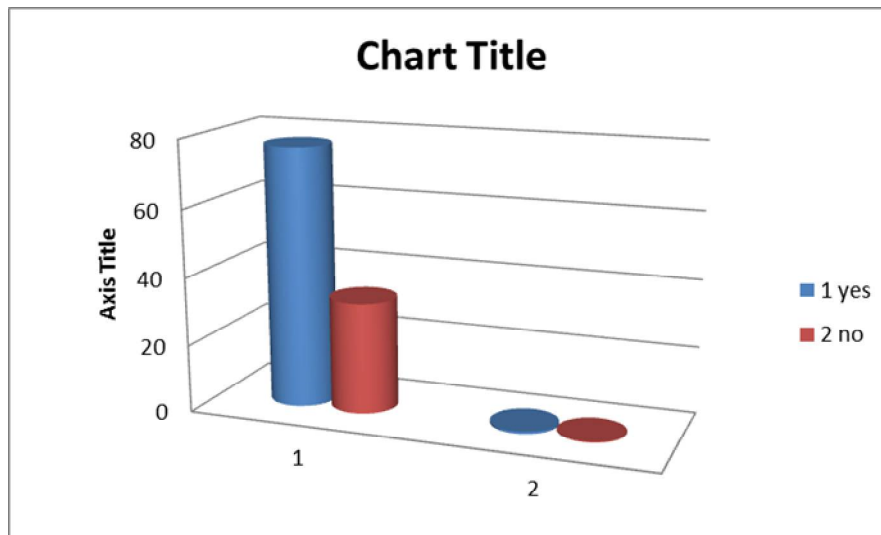
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENTAGE
1	Yes	77	70
2	No	33	30

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INFERENCE

It is inferred that 70% of the respondents are ready to wear banana clothing, 30% of the respondents are not ready to banana clothing.

V. CONCLUSION

Banana is cultivated in about 2, 30,000 hectares of land and the fiber yield is around 8.7 lakh toned. Though banana fiber extraction is not done on any large scale at present, banana fibers are reported to have been spun on the jute spinning machinery and used hand bags and other fancy articles. Agro-based bio-fibers have the composition, properties and structure that make them suitable for uses such as composite, textile, pulp and paper manufacture. In addition, bio-fibers can also be used to produce fuel, chemicals, enzymes and food. Byproducts produced from the cultivation of corn, wheat, rice, sorghum, barley, sugarcane, pineapple, banana and coconut are the major sources of agro-based bio-fibers. Likewise banana fiberbased production processes, structure, properties and suitability of these bio-fibers are to be identified for various industrial applications.

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