

## BANANA FIBER PRODUCTS: AVENUES FOR ADDITIONAL INCOME

Nagaland is one of the seven sister's states of India. Banana is third important fruit crop of the state after pineapple and passion fruit, covering an area of 6,650 ha with the production of 40,200 MT. Wild cultivars of banana are growing abundantly in jungles of state.

The banana fruit bunches and leaves are main sources of income. Tender pseudostem of some local cultivars is used for culinary purposes, whereas major portions of Banana pseudostem are wasted. These pseudo stem can be utilized judiciously for extraction of fibre for additional income.

Banana fiber extraction from pseudo stem is a new and an innovative technology to the people of Nagaland, which can provide a platform for entrepreneurs to venture into the Fiber production Industry. With the increasing environmental awareness and growing importance of eco-friendly fabrics, products made of banana fiber has been recognized for all its good qualities and now its application is increasing in other fields too such as apparel garments and home furnishings.

### EXTRACTION PROCESS

Banana fiber extractor machine can be procured from Central Tobacco Research Institute, Rajahmundry, Andhra Pradesh, for extraction of Banana fibre which can be easily operated by an unskilled labour and gives maximum output. The same machine can extract pineapple leaf fibre also.

### Sheath preparation

The pseudostem has to be cut into 4-5 inches breadth having length of 7-8 feet. The length of pseudostem may vary depending on the need of fibre length. The cut pseudostems should be used within 48 hours after cutting and the cut-open sheaths have to be processed on the same day.



### Extraction

The cut pseudostems are divided into pieces and inserted into the machine for fiber extraction. Once the fibre is extracted it needs to be washed thoroughly with clean water to remove the dirt and pieces of pseudostems.



### Drying

The fiber has to be dried properly in sunlight/shade after washing.



### Raw fiber

The fiber must be bundled out after drying the moisture content. From 10kgs of raw pseudostem we can extract 250gms of net fibre. Wild banana

fibres are more rough, thicker thread and stronger as compared to jahajee, chini champa and malbhog. Wild banana is off-white in color whereas fibres from cultivated banana are more whiter and gives better shine. The fibre of pineapple leaf is greenish in color, softer thread as compared to that of banana fibre.



*Agave Americana* leaves can also be utilize for extraction of fibre but cares should to be taken while extracting the fibre because the juice of the *Agave* leads to skin irritation in hands.



### Product weaving

The fibre is blended with various materials such as wool or jute fibre for preparation of various products. Banana fibre alone is also weaved for making different handicraft items such as door mat, tea coaster, sling bag etc.



### Final products

KVK Dimapur has initiated the preparation of door-mats, table mats and bags using the banana fiber and blending with different materials. Banana fiber can be refined and used to make fine cushion covers, Neck ties, bags, table cloths, curtains etc. Rugs made from banana silk yarn fibers are also very popular world over.



### Economics

Four ladies can prepare 12 doormats in one day and can earn the net profit of Rs.100/doormat.

Preparation of doormat & table mat with wool & banana fibre. 4 mandays @ Rs.150= (6working hrs/day) 6x4=24hrs	4 mandays can make 12 nos of doormat @ Rs 150/piece = 1800.00 Net profit = 1200.00 Profit/piece=Rs.100
Preparation of tea coaster. 1 manday @ Rs.150.00 (6 working hrs/day)	1 person can make 10-12 pieces of tea coaster @ Rs.30/piece (12x 30=360) Net profit = 210.00 Profit/Piece=Rs.18 – 20.

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Prepared by:

*Mrs.V.Kenny Rhetso (SMS Home Sc.)  
Dr.Anamika Sharma (PC)*

KVK,Dimapur ICAR Research Complex for NEH Region,  
Nagaland Centre, Jharnapani, Medziphema

For further details please contact

The Joint Director,  
ICAR Research Complex for NEH Region,  
Nagaland Centre, Jharnapani, Medziphema -797 106



**Krishi Vigyan Kendra Dimapur**  
ICAR Nagaland Centre,  
Jharnapani, Medziphema-797106  
Nagaland

