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## 2. Bamboo sliver weaving tray

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### a. Introduction

Woven bamboo products are produced from thin Slivers/strips of bamboo. There are a wide variety of such products and they have been closely associated with the development of civilizations in bamboo growing regions in India for many millennia. The product may be primarily intended for agricultural use, such as baskets for pulses and vegetables or animals and winnowing trays for cereals, or they may be household products such as baskets, trays and mats.

With change in lifestyle now days Bamboo trays are used to serve tasty appetizers or a round of drinks in hotel and restaurants, or a regular cup of tea in home and offices. The beautiful natural hand-crafted Bamboo trays provides perfect gift along with aesthetics and added socio economic and environmental benefits.

### b. Market Demand

The market for bamboo handicrafts especially “Bamboo Tray” is large and ever-expanding. Handicrafts are very popular in many countries of the world where their natural appearance and their environmentally friendly production methods are major selling points.

### c. Production Target

Bamboo weaving can be done in a very decentralised manner and is easily done by homebound women and those that are unable to do manual labour. The unit may be established on a small scale as private household businesses or on a larger scale as a cooperative or government enterprise. Therefore, bamboo weaving generates employment, especially for women and other disadvantaged groups, ensures better income distribution, and earns valuable foreign exchange through exports.

### d. Assumptions, if any

The essential requirements for a successful unit are:

- Regular supply of bamboo culms used in basketry (Larger internode lengths)
- Unskilled and skilled labor
- Small amount of start-up capital; and
- Market access.

### e. Production Process

Slivers/Strips are the basic materials for weaving various bamboo crafts. Proper treatment of raw materials is a very important aspect for a procedure that affects the final quality of the goods. The processing techniques for making bamboo splits are;

- cutting of bamboo culms
- Cross-cutting
- Knot removal
- Splitting
- Smoothing
- width-sizing
- Slivering/stripping

**f. List of machinery required along with quantity with Unit Price.**

- The tools required for manual weaving bamboos Trays are; Slivering/stripping knives, Hand saws, striking planks, shaving knives and hand drills. These tools can easily be purchased from any local tool supplier or can be made by the weavers themselves.
- Although cross-cutting, splitting of bamboo culms and making strips and threads can be done manually, machines are normally used to increase productivity, reduce wastage of raw materials, increase the yield of bamboo strips and remove drudgery in the primary processing of the culms. The main machines are crosscutting machine, sliver-making machine, splitting machine and width sizing machine.

Sl. no	Tools & Equipments	Nos.	Unit Price in INR)
1	Slivering/stripping knives	5	150
2	Hand saws	5	200
3	shaving knives	5	250
4	Electric cross-cutter	1	10,500
5	Manual Splitting machine	1	6,500
6	Thin Sliver-making machine	1	36.000
7	Width sizing machine	1	4,500
8	Angle Grinder	1	2,500

## ONE PAGER SUMMARY OF BAMBOO SLIVER WEAVING TRAY

Sl. No.	Particulars	Description				
<b>A. Project Description</b>						
1	Proposed Project	<b>Bamboo Tray (Sliver Weaving)</b>				
2	Capacity of the machine (at 100% capacity utilization)					
3	Year wise capacity utilization	Year- 1	Year- 2	Year- 3	Year- 4	Year- 5
		70%	80%	90%	100%	100%
4	Raw Materials Required	Bamboo, Cane, Alum, Glue, Colour/Dye agent, Miscellaneous items, Varnish/Lacquer				
5	Final Product	Bamboo Tray (Sliver Weaving)				
6	Infrastructure Required	Shed (500 sq ft)				
7	Plant and machinery	Slivering/stripping knives Hand saws shaving knives Electric cross-cutter Manual Splitting machine Thin sliver making machine Width sizing machine Angle Grinder				
8	Employment Generation	8 Hired labour – 4 semiskilled, 4 skilled				
<b>B. Project Cost</b>						
						<b>(Figures in Rs. Lakhs)</b>
1	Land (own)					0.00
2	Civil works and Buildings (500 sqft @200/sqft)					1.00
3	Machinery					0.94
4	Others					0.30
5	<b>Sub-total (A)</b>					<b>2.24</b>
6	Working Capital Margin @40% of Total WC Requirement					0.93
7	<b>Total Project Cost</b>					<b>4.57</b>
8	Total Working Capital Req (B)					2.32
<b>C. Means of Finance</b>						
						<b>(Figures in Rs. Lakhs)</b>
9	<b>Total Funds Required(A+B)</b>					<b>4.57</b>
10	TERM LOAN (75% of A)					1.68
11	WORKING CAPITAL (60% of B)					1.39
12	<b>Total Loan</b>					<b>3.08</b>
13	Equity					1.49
14	<b>Total Own Contribution</b>					<b>1.49</b>

<b>D. Financial Benchmarks</b>		<b>(Figures in Rs. Lakhs)</b>			
		<b>Year- 1</b>	<b>Year- 2</b>	<b>Year- 3</b>	<b>Year- 4</b>
1	Target Revenue (Lakh)	13	15	17	19
2	Break Even Point	58.00%	50.96%	44.93%	40.45%
3	DSCR including Principal repayment	4.05	3.20	4.33	5.74
<b>E. Basic Assumptions</b>					
1	Production of sliver woven tray	8 labour will on average be able to produce 4 non-woven trays per worker per day, working 300 days in a year. Price of one such tray is assumed as Rs 200. Whole bamboo will be used. Roughly 10 trays of size 18x10 inch may be created from one bamboo.			
2	Machinery	This is a profile of a household level enterprise with 8 hired labour.			
3	Interest rate assumed	11%			
4	Repayment period	5 Years with 3 months moratorium			
<b>F. Others</b>					
1	Training Institutes	CBTC Meghalaya, BCDI Agartala, IIE Guwahati, TRIBAC			
2	Whether the service is in the Negative list under NEIDS and MSME?	No			