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**NASENI**

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# **PRODUCTION OF PAPER FROM BAMBOO CULMS AND LEAVES**



# PROBLEM

- The problem this research seeks to address is the overdependence on wood for paper production which leads to deforestation.
- This research is aimed to curb deforestation which resulted to climate and global warming, loss of biodiversity, soil erosion, natural disasters e.t.c.
- These problems mentioned above affect human beings and wild animals.

# SOLUTION

Production of paper from non-wood fibers can reduce deforestation and environmental problems associated to it.

**The benefits of the project are:**

- ✓ Environmental Sustainability
- ✓ Waste Utilization
- ✓ Economic Benefits
- ✓ Good Fiber Characteristics
- ✓ Reduction of Environmental Impact of Paper Industry
- ✓ Research and Innovation

# MARKET OPPORTUNITY

## Market size in:

- **TAM (Total Addressable Market)** =All tissue & hygiene paper demand  $\approx$  US\$8.96 bn (2025) .That is the broader market size which bamboo paper could possibly replace
- **SAM (Serviceable Available Market)** =~US\$45–90 million

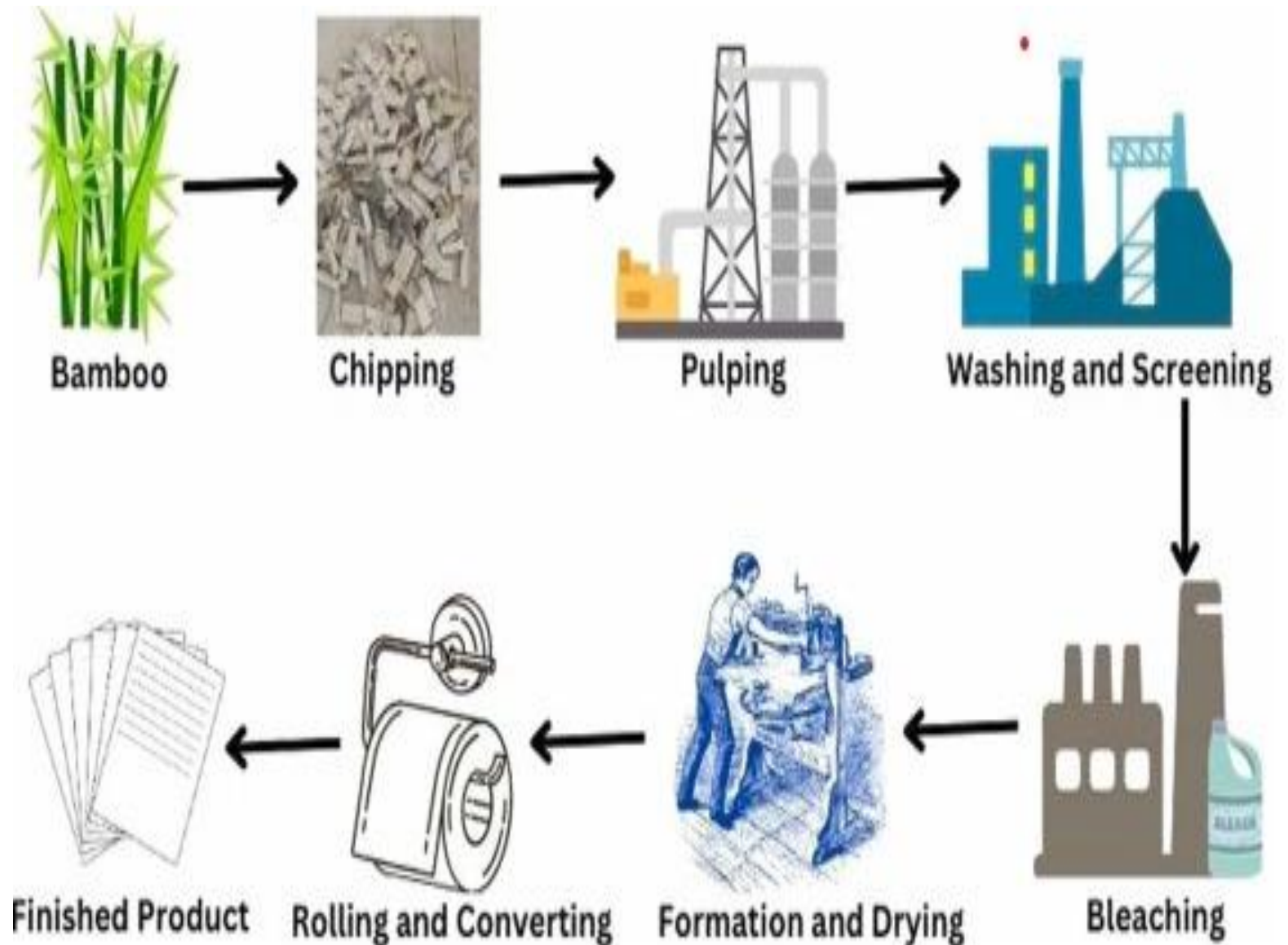
These are local revenue potential estimates in Nigeria for bamboo paper products in near to medium term (1-3 years) if executing well.

# Market Opportunity Continues

Growth threads;

- Bamboo paper appeals as it's biodegradable, renewable, and seen as more eco-friendly than some wood-based options
- Bamboo grows much faster than trees which used for conventional pulp, which means quicker replant cycles, faster yields
- Advances in pulping / bleaching / processing techniques that improve quality (brightness, strength, texture) of bamboo paper, making it more competitive with wood pulp paper.
- Subsidies, incentives, or regulations pushing for non-wood fiber use; bans or limitations on plastic packaging / single-use plastics. These give bamboo paper an edge.
- Bamboo paper is attractive because it's sustainable, scalable, fast-growing, policy-supported, and consumer-preferred with high growth and large substitution potential.

# PRODUCT/TECHNOLOGY



# BUSINESS MODEL

## **How money can be made;**

- ✓ You make money on bamboo paper by selling premium, sustainable products at higher margins, expanding into packaging, licensing, and carbon credits as the business matures.

## **Pricing strategy**

- ✓ Price 10–20% higher than regular exercise books. Highlight value: “eco-friendly”, “forest-saving”, “chemical-free”, “hypoallergenic”. The best pricing strategy for bamboo paper is a tiered model: Mass-market line with small premium (~5–10%) to build scale. Premium line (20–30% premium) for eco-conscious buyers. Bulk contracts for institutions. Subscriptions to lock in urban customers.

# **BUSINESS MODEL CONTINUES**

## **Customer Acquisition Approach**

- ❖ **Awareness and Education (Top of Funnel)**  
**Eco-storytelling:** Highlighting the benefits of bamboo, such as its fast growth, sustainability, and eco-friendly nature without contributing to deforestation.
- ❖ **Government tenders:** Position as eco-friendly option in public procurement.



# Competition Continues

- The competitive advantage is converting bamboo papers to exercise books which is very important in education sector.
- Simple competitive matrix

# GO-TO-MARKET STRATEGY

- **Direct to schools:** supply private and then perhaps public schools. Possibly using sales representatives
- **Retail stores / stationery shops:** get listed in local stationery shops, supermarkets, bookstores
- **Online sales:** via your PEDI website; marketplaces (Jumia, Konga, etc.) if in Nigeria
- **Pop-ups / markets:** stalls in busy local markets.

# FINANCIALS AND PROJECTIONS

Year	Units sold	Revenue (₦)	Selling Price/unit (₦)	Cost Price/Unit (₦)	Cost of goods (₦)	Gross profit (Rev – COG) (₦)
1	5,000	1,850,000	370	270	1,350,000	500,000
2	10,000	3,700,000	370	270	2,700,000	1,000,000
3	20,000	7,400,000	370	270	5,400,000	2,000,000

# Financials and Projections Continues

- **Key Assumptions Product**

Standard 60-leaf bamboo exercise book .

Production Capacity: 5,000 books/year.

Selling Price: ₱370 per book

Cost of Production per Book: ₱270

Marketing & Overhead Costs: ₱700,000 yearly

- **Break-Even Analysis**

Selling Price: ₱370 per book

Cost of Production per Book: ₱270

Contribution margin per book =  $\text{₱}370 - \text{₱}270 = \text{₱}100$

Fixed cost per year = ₱1,850,000

Break-even units =  $1,850,000 / 100 = 18,500$  books

# TEAM AND ASK

S/N	Name	Designation	Qualification	Specialization	Signature
1	AJIBOLA Tawakalitu	ACSO	M.Sc. ICCON	Industrial Chemistry	
2	ASHIRU Nofiu Olatunbosun	ACSO	M.Sc. ICCON	Industrial Chemistry	
3	AKINJOHNS ON Alaba Elizabeth	PSO	B.Sc. ICCON	Chemistry	
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6	FAOLA Aderonke Esther	CRDO	Ph.D. COREN	Metallurgical and Materials Engineering	

# TEAM AND ASK CONTINUES

A total sum of thirty-nine million, six hundred and five thousand, five hundred Naira (₦39,605,500) only is required to execute the project (production of paper from bamboo culms and leaves). The quoted sum covers materials, material tests, transportation and patenting.