





# Promote Bamboo MSME Clusters for Sustainable Development (Jan, 2018-Dec, 21)







R G V N Reaching the Unread

Coordinator: Foundation for MSME Clusters (FMC), India





- More than 5 million people, half of them being women in the tribal regions across 18 states out of the 29 states of India where abundant quantity of bamboo is available as a resource for their livelihoods.
- However in the **bamboo processing and product manufacturing segment**, the number is likely to be around **3 million only**
- While this bamboo resource has been augmented by a range of public initiatives but not sufficiently harnessed in terms of its **market applications**
- There is a huge scope for replacement of less sustainable resources and for creation of green jobs by effectively harnessing bamboo by upgrading existing products and introducing new products duly linked with markets
- However, despite several pubic support initiatives, this scope is not realised due to lack of customised, coordinated and converged local action that integrates a package of inputs through a strong self-sustainable local eco-system

One of the most important nature's substitutes for the **endangered forest hardwoods** and partially energy intensive **steel**, **plastic and other construction materials and lifestyle products** 

It is a quick-growing (maturity cycle of 3-5 years), versatile resource that grows annually at **10-30% compared to 2-5% for trees** that can take 40-50 yrs

1 tonne of steel leads to 2 tonnes of carbon emission whereas bamboo uses carbon di-oxide and releases oxygen.

Bamboo processing and production **consumes less** energy (30 MJ/m3 per N/mm2) compared to concrete (240), steel (500) and timber (80). Greater usage of bamboo leads to increased production of diversified sustainable products thus mitigating climate change.

> Due to fast growth, it **absorbs more CO<sub>2</sub> (62 MT/year/ha) and releases 35% more oxygen** than an equivalent strand of hardwood tree

Zero waste potential as all the parts can be utilized

Has a **tensile strength of 28,000 lb/sq. inch** compared to 23,000 lb/sq. inch for mild steel, making it world's best natural engineering materials, and an essential component of **earthquake resistant construction and pre-fabricated housing** 

It helps **prevent soil erosion** due to its wide spread root system and large canopy

It **sustain rive r banks** and serves as a good wind break

It helps decrease water pollution as it devours high amount of nitrogen

It can grow in arid regions where other crops fail due to droughts

Bamboo 4 SD in India

Overall objective	Baseline	Targets	
	(2018- reference year)		
Contribute to	-Estimated turnover: 300	-Increased turnover by 300% by 2028	
promoting green	million Euro	leading to additional institutional -	E a E
economy and	-Estimated jobs in bamboo	credit offtake of 300 million Euros in	Se we
economic	processing MSMEs in India is	more than 100 such existing clusters	2 mar
prosperity of the	3 million of which women are	-Increased green & sustainable jobs by	Ninus and a
tribal India	more than 50%	100% by 2028 of which more than 50%	Arunacsh 3
	-Estimated substitutable	will be women	Assam Assam
	market of unsustainable	-25% of the unsustainable product	Meghalaya
	resources with bamboo in	market in India replaced with bamboo	F Jharkhand, Agartala
	India is 2 billion Euro	products	Bhopal Madhya Pradesh

Bhubneshwar

• Capitals

Odisha

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**Specific objectives:** 

- 1. Support enterprise development for sustainable supply of bamboo products and generate improved livelihoods
- 2. Promote select new bamboo products among high potential buyers
- 3. Sustain and upscale local initiatives through community-led multi-stakeholder development models
- 4. Promote sustainable linkages between financial institutions and local enterprises.
- 5. Strengthen policy dialogue and dissemination of proven development models relevant for bamboo sector



#### <u>Outcomes</u>

### Oc 1)

- 2250 MSMEs of which 40% are women owned, start/expand bamboo product supply worth 25.3 million Euros to existing/new markets, impacting 10,000 livelihoods (more than 50% women) through new income to the tune of 13 million Euros
- Improved OHS and social security
   Oc 2)
  - At least 20 new buyers undertake sourcing of 5 high potential bamboo products in each of the targeted clusters through 20 successful business start-ups

### Oc 3)

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9 local Facilitating agencies (FAs)
provide services beyond Action, 50
Producer networks (PNs) created are
vibrant,9 CFCs created/ strengthened,
20 equipment/ inputs suppliers and 140
BDSPs provide strategic services
sustainably

#### Oc 4)

 At least 10 FIs provide credit through cluster financing instruments to 2250 MSMEs worth 9 mn Euros

## Oc 5)

 200 Policy makers from at least 3 SAARC countries sensitised and 9 Indian states initiate replication of similar intervention models



# **Existing Products**





Newly developed Products





