



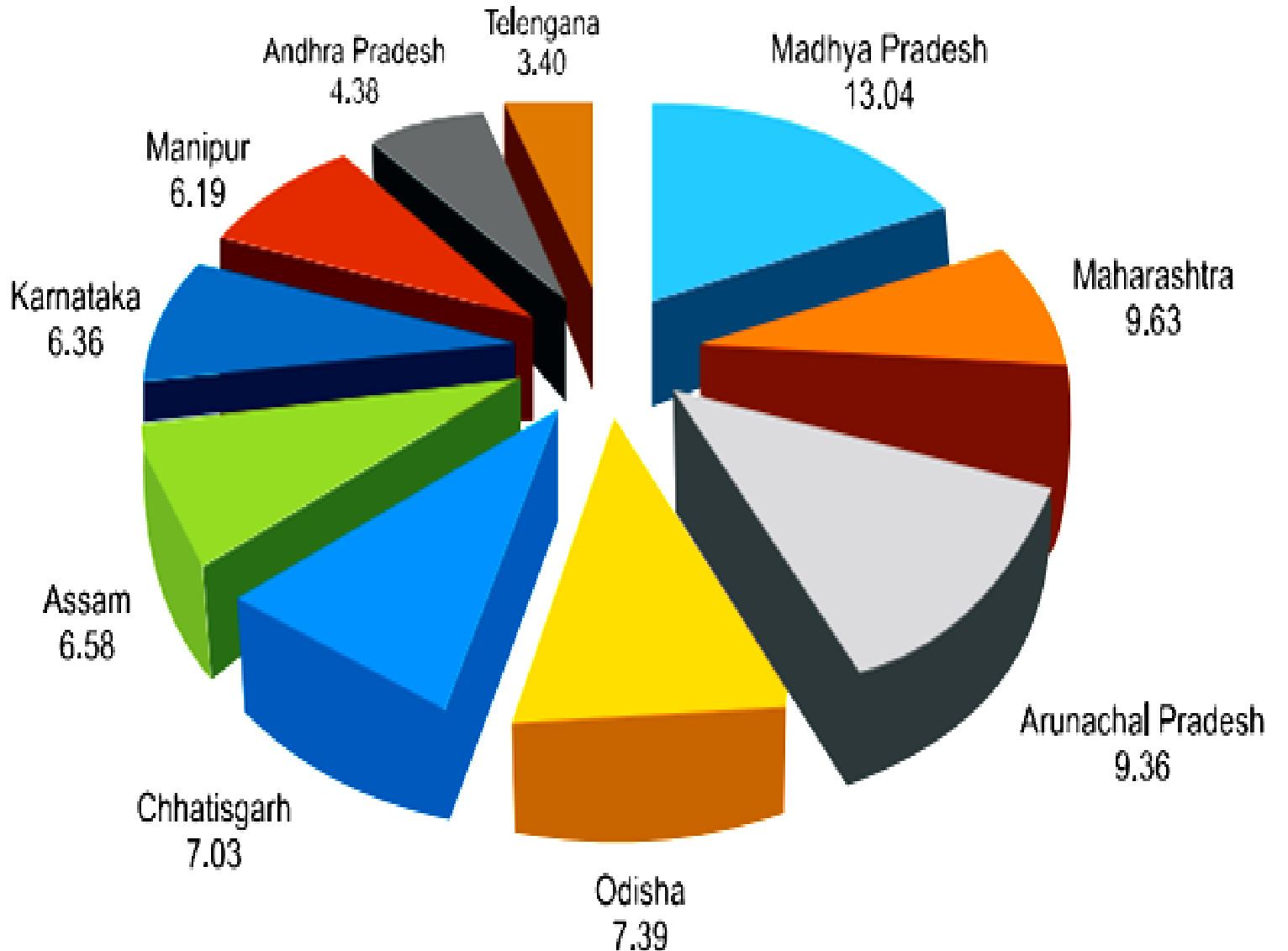
**STATE BEST PRACTICES: AREA COVERAGE,  
VARIETY AND INDUSTRY PROSPECTIVE  
MADHYA PRADESH**

# BAMBOO RESOURCES IN INDIA

India State of Forest Report, 2019, India is home to about 125 indigenous and 11 exotic species

16 million hectares of area.

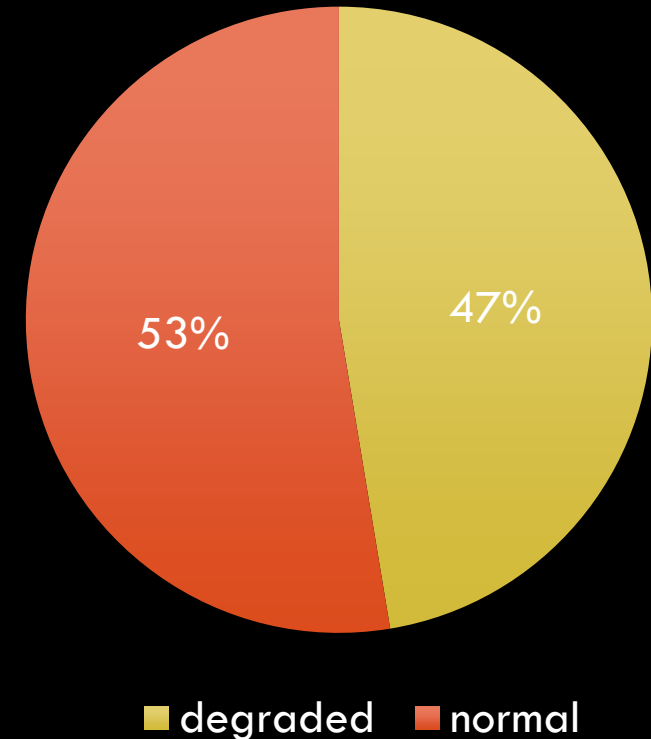
Top 10 states with bamboo bearing area (in % in Recorded forest areas



# BAMBOO RESOURCES IN M.P.

- Over 651629.331 hectares of area.
- It has been a **part of the way of life of many traditional communities like the Bansods, Dhanuk Vanshkar (traditional bamboo-based artisans), and Nistaris (communities living around forest fringe areas using bamboo majorly for house repair, crop harvesting, etc.).**
- Around half (47%) of these forests have been degraded causing loss of production and potential livelihood opportunities from this “sustainable resource”.

**Total bamboo bearing area in forests= 651629.331 ha**



Source: Working Plan

Madhya Pradesh State Bamboo Mission (MPSBM) was established in 2013 as a nodal implementing agency of National Bamboo Mission in the state with the vision: **"to promote and facilitate bamboo-based development in a holistically sustainable manner, to address multiple dimensions, including ecological, economic, social and cultural issues"**.

# STATE'S APPROACH TO BAMBOO SECTOR DEVELOPMENT

## Production Phase

- Increasing production & productivity (HYVs, DNA finger prints bar coding, establishing & accrediting nurseries, etc.)
- Develop/Standardize package of practices.
- Standardization of harvesting techniques

## Post-harvest Phase

- Establishing primary & secondary processing units in production areas.
- Setting up of demand-driven treatment facilities & CFCs.
- Creation of storage & marketing infrastructure.
- Skill development of artisans, designers, architects , etc.

## Industrial Phase

Encouraging:

- Bamboo in construction,
- Engineered bamboo products development (particle boards, corrugated sheets, etc.)
- Bamboo based energy generation, Bamboo based carbon credits & RECs,
- & setting up BEZs.

## **THE PRODUCTION PHASE** focuses on :

- ✓ **Development and Identification High Yielding Fast Growing Commercially important species and higher quality bamboo varieties,**
- ✓ **Development of species-specific molecular markers for important bamboo species to allow for their proper identification and avoid unintentional adulteration (DNA finger prints bar coding library)**
- ✓ **Establishment and accreditation of nurseries for propagation of Quality Planting Material so that growers have a reliable supply of QPM near their fields,**
- ✓ **Standardization / evolving package of practices**

## **THE PRODUCTION PHASE** focuses on :

- ✓ **Develop economic models with Cost-Benefit analysis**
- ✓ **44 Accredited Nurseries and 4 Tissue Culture Labs/Nurseries**
- ✓ **73 DemoPlots**
- ✓ **12 Bamboosetum**

# BAMBOO PLANTATION OUTSIDE FORESTS

- Since the 2017 Amendment to Indian Forest Act, 1927 exempting bamboo from definition of tree, the state has tried to leverage this policy change for **expanding bamboo grown outside forest areas.**
- Since the inception of MPSBM, **14,587 ha of non-forest agricultural lands** have been covered under bamboo plantation directly **benefitting a total of 15,864 farmers.**
- **Major commercially important species** of bamboo being promoted under the plantation subsidy scheme are *Bambusa bambos*, *Bambusa balcooa*, *Bambusa tulda*, *Thyrostachys oliveri*, *Bambusa vulgaris* (Green), *Dendrocalamus asper*, *D. brandisii*, *D. strictus*, *D. stocksii*, among others.



# BAMBOO PLANTATION OUTSIDE FORESTS

## Bamboo Plantation under MPSBM (on private agricultural lands)

Year	Beneficiaries	Area (in ha)
2016-17	6712	3768
2017-18	16	53
2018-19	1752	2316
2019-20	1261	1350
2020-21	3597	3520
2021-22 (ongoing)	2526	3580

**TOTAL AREA 14587 HA**

# BAMBOO PLANTATION IN FOREST AREAS

- Under **MGNREGA** scheme, through SHGs comprising of families from communities residing in forest vicinity.
- They receive **both, the wages earned under MGNREGA and the income earned from yields from future harvesting by retaining the usufruct rights.**
- Through a tripartite arrangement (MoU) among the Forest Department, JFMCs & SHGs .

## Bamboo Plantation in Forest Areas in 2021-22

Scheme	Area (in ha)
Under MGNREGA ( in 29 districts) Year 2020	1250
Under MGNREGA ( in 29 districts) Year 2021	2749

# BAMBOO PLANTATION IN FOREST AREAS

**Bamboo Plantation taken up through funds available under**

- **CAMPA,**
- **Implementation of Working Plan,**
- **Green India Mission**
- **Forest Development Corporation**

**This year we have planted more than 1232 ha. Here we are involving the local JFMC members for active management and sharing 100% usufruct benefits.**

# DEMO PLOTS

- To encourage more farmers to **cultivate bamboo and receive remunerative returns, 73 demo plots** (1 ha each with monetary incentive of Rs. 3,00,000 per plot) have been established to develop and demonstrate best **agronomic package of practices** to growers.
- To deliver scientifically proven best practices on bamboo intercropping systems, a research study on **“Productivity and Profitability of Bamboo based remunerative cropping system for livelihood security of Farming community of Madhya Pradesh”** funded under NBM's scheme is being carried out by Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior.
- The main objectives of the study are to observe the effects of bamboo mixed farming on the growth, production, and productivity of agricultural crops with a **detailed cost-benefit analysis** of various comparative models of intercropping.
- These successful models can be replicated by farmers across the state to **“multiply their incomes”**.

- MPSBM has collaborated with **SFRI, Jabalpur** to conduct a study titled **“Identification of Best Performing Bamboo species for Enhancement of Income of Farmers in Madhya Pradesh”**.

- This study will be carried out in the 12 bambusetums established in 11 agro-climatic zones by MPSBM, demo plots, and other bamboo plantation.

- **Based on its results, MPSBM will adopt the best performing species in terms of their survival, growth and productivity for promotion under NBM's schemes.**

Agro-climatic zone	Districts	No. of species
Jhabua Hills	Alirajpur	12
Nimad plain	Khandwa	15
Malwa plateau	Ujjain	19
	Indore	15
Vindhya Plateau	Raisen	10
Satpura Plateau	North Betul	10
Central Narmada Valley (In Agricultural sector-Pvt.)	Hoshangabad	12
Kaimur plateau & Satpura Hills	Jabalpur	12
	Satna	16
Northern Hills Region of Chattisgarh	Anuppur	7
Gird Region	Bhind	12
Chhatisgarh plain	South Seoni	12
Bundelkhand	Tikamgarh	8

# TARGET GROUP

## Stakeholders

Farmers, wasteland & degraded land owners, JFM committee, artisans, MSMEs, scientists, specialists, traders



## Area

Forest & revenue lands, wastelands, ravines, river banks, road sides, canal sides, etc.



## Special focus

Traditional communities, differently abled, weaker sections of the society, landless, women, unemployed & underemployed youth,



# POST-HARVEST PHASE

- ✓ Efforts are being directed towards **bamboo treatment, processing, godowning, and marketing.**
- ✓ Major activities being undertaken are **incentivizing bamboo based MSMEs through credit linked back ended capital subsidy scheme (80 units have been sanctioned and are being set up)**, technological enhancement and modernization of indigenous tools and equipment in Common Facility Centres .
- ✓ **Special emphasis on bolstering traditional bamboo-based handicrafts & cottage industries and village enterprises.**
- ✓ Imparting **advanced skill development trainings and workshops (around 2044 plus trained)** to bamboo artisans in collaboration with various reputed institutes like (BCDI), Agartala, MPCST, National Institute of Design, Ahmedabad, and M.P. State Minor Forest Produce Federation.

# POST-HARVEST PHASE

- ✓ To sustain and promote the livelihoods of traditional bamboo artisans, **9 CFCs** are functioning with the assistance of MPSBM across the state. Equipped with modern tools and machinery, these aid in manufacturing and processing of bamboo based products by local artisans.
- ✓ For providing **marketing support** to them, MPSBM promotes bamboo products in State and Nationwide Exhibitions, Trade fairs, Rural haats, Bamboo bazaars, Bansi emporiums, etc.
- ✓ Further online portals:
  - [mianzi.in](http://mianzi.in): online selling website; sells and exports products manufactured by artisans from CFC Sanora, Satna.
  - [ebamboobazar.org](http://ebamboobazar.org): our web application facilitating exchange of information between Growers, Traders, Artisans, Manufacturers, Professionals, CFCs, etc.



# MARKETING OF BAMBOO PRODUCTS THROUGH BANSI EMPORIUMS

<b>Emporium</b>	<b>Marketing Agency</b>
Balaghat	CFC Garra & Baihar
Bhopal	CFC Garra, Baihar & Sanora (Satna)
Timarni, Harda	CFC Timarni (Harda)
Indore	CFC Timarni & CFC Baihar
Mukundpur Zoo, Rewa	CFC Sanora (Satna), CFC Sidhi
Sanora , Satna	CFC Sanora (Satna)
Narsinghpur	CFC Narsinghpur

# INTERNATIONAL HERBAL FAIR 2021

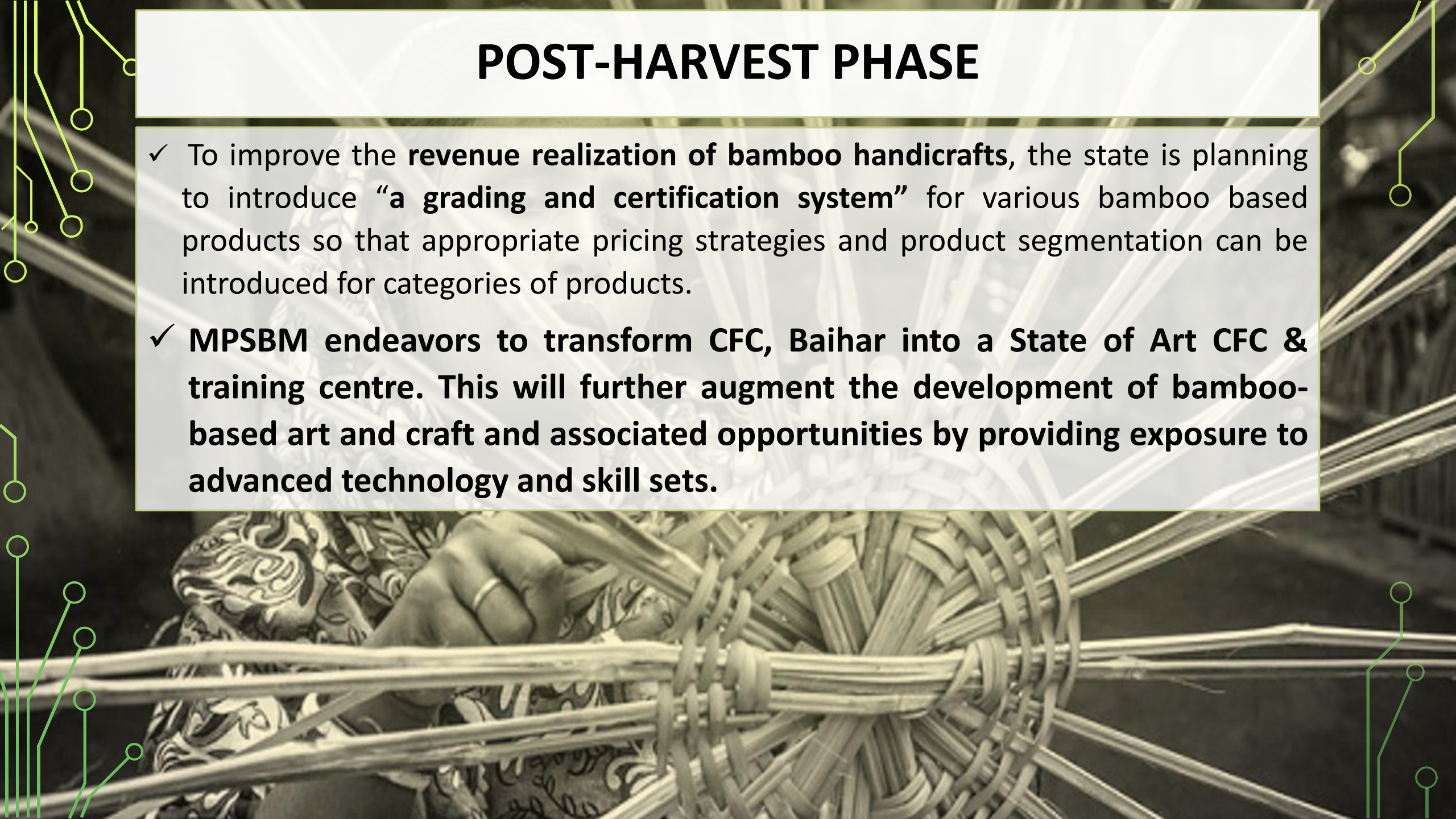


# INTERNATIONAL HERBAL FAIR 2021



# POST-HARVEST PHASE

- ✓ To improve the **revenue realization of bamboo handicrafts**, the state is planning to introduce “**a grading and certification system**” for various bamboo based products so that appropriate pricing strategies and product segmentation can be introduced for categories of products.
- ✓ **MPSBM endeavors to transform CFC, Baihar into a State of Art CFC & training centre.** This will further augment the development of bamboo-based art and craft and associated opportunities by providing exposure to advanced technology and skill sets.





For development of techniques for building construction using bamboo as a **low cost high strength housing material**, an MoU has been entered into with the school of planning architecture (SPA), Bhopal to adapt the vernacular systems of architecture to modern, contemporary applications. Under this, a bamboo lab is being established at SPA bhopal, to research, experiment, and design pragmatic models of bamboo products and buildings.

# THE INDUSTRIAL PHASE

**Large scale substitution of timber with bamboo, adopting bamboo as a feasible renewable source of energy,**

**Establishment of industries for manufacturing PEBB, bamboo based composites  
(processed engineered bamboo board and bamboo particle boards)**

**Bamboo based Ethanol, Activated charcoal/biochar**

**R&D and production of fixed carbon from bamboo and developing carbon markets for bamboo (trading of bamboo based carbon credits, and encouraging investments in renewable energy credits derived from bamboo's use as a source of energy).**

**The Mission is currently deploying its resources towards implementation activities in production and post-harvest phase which will provide for a strong foundation for development of the upcoming Industrial phase.**



RED NOTE 8 PRO  
DUAL CAMERA

# EXPECTATIONS

- The National Bamboo Mission's Operational Guidelines (2019) calls for integrated efforts from various ministries/ Govt. Departments. Though this idea of convergence and integrated efforts by directing available resources with departments specializing in various factors related to bamboo sector development, works well as a guiding framework, its translation into field isn't that co-ordinated and centralized which leads to redundancy, over-lapping activities, and wastage of resources without direct result.
- This can be overcome by having a unified, umbrella bamboo policy in place, and a single implementation agency through which efforts from various departments can be directed.
- This will lead to more efficient, transparent implementation which will then make it easier to monitor and evaluate input, output, outcome matrix for bamboo sector development, and a better, adaptive planning and management system.



# EXPECTATIONS

- ✓ The **convergence of Agriculture Infrastructure Fund and Capital subsidy scheme under NBM** provides an additional benefit of 3% interest subvention and **Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)** coverage for creation of post harvest management infrastructure.
- ✓ To encourage investments from private entrepreneurs, **the mission is persuading NBM to get all of its projects listed under Credit linked back-ended capital subsidy scheme registered under CGTMSE**, so that lack of collateral is no longer an impediment for aspiring entrepreneurs.
- ✓ The state **seeks assistance of NBM for setting up of a Bamboo Technology Park** in the state that can serve as a platform for research, development, incubation, experimentation, testing, and extension of advanced technology for bamboo processing and value addition.



THANK

YOU

