



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



Coordinator: Foundation for MSME Clusters (FMC), India





Bamboo 4 SD in 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 public 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 CO₂ (62 MT/year/ha)** and **releases 35% more oxygen** than an equivalent stand 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 river banks** and serves as a good wind break

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

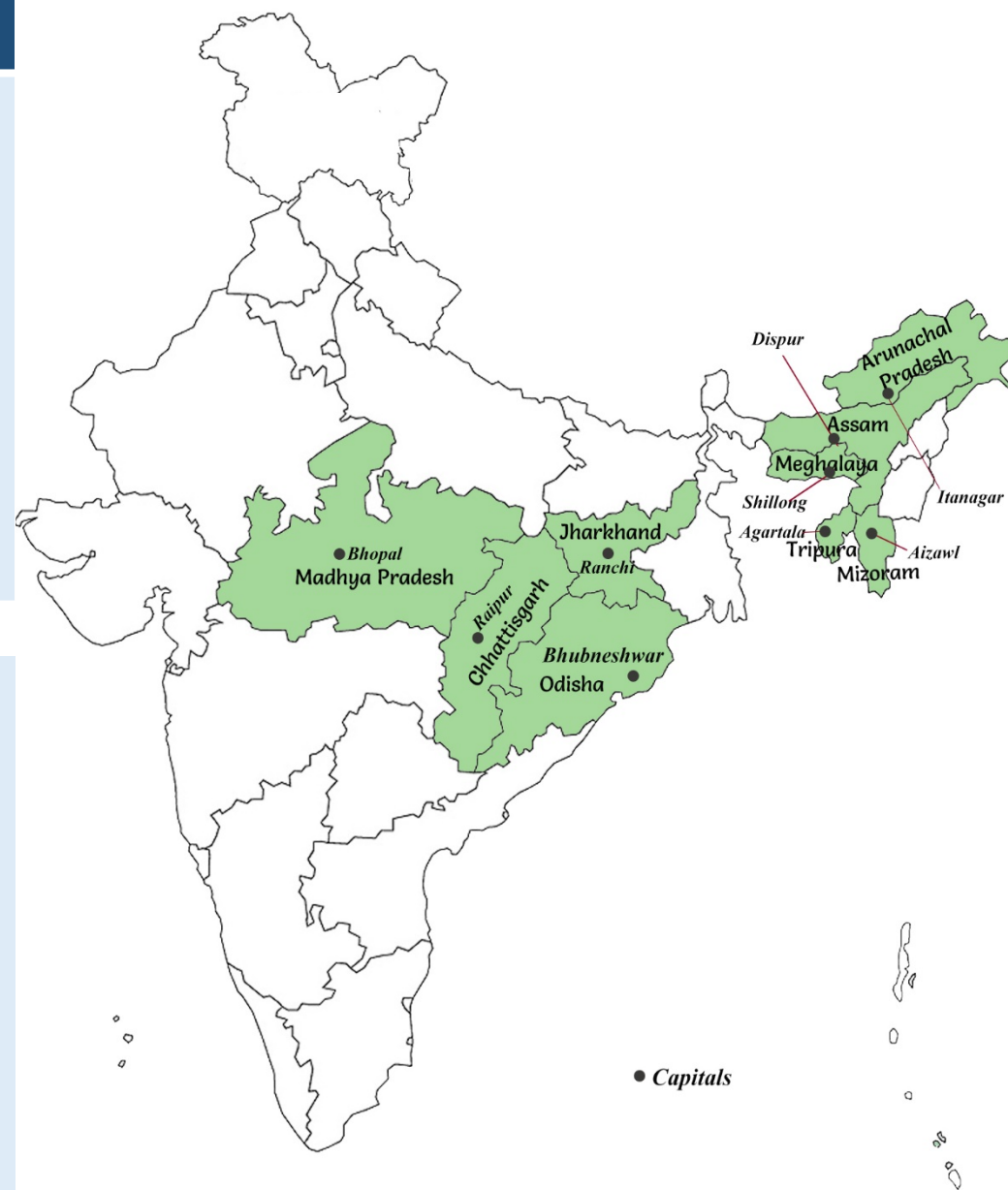
It can grow in arid regions where other crops fail due to droughts

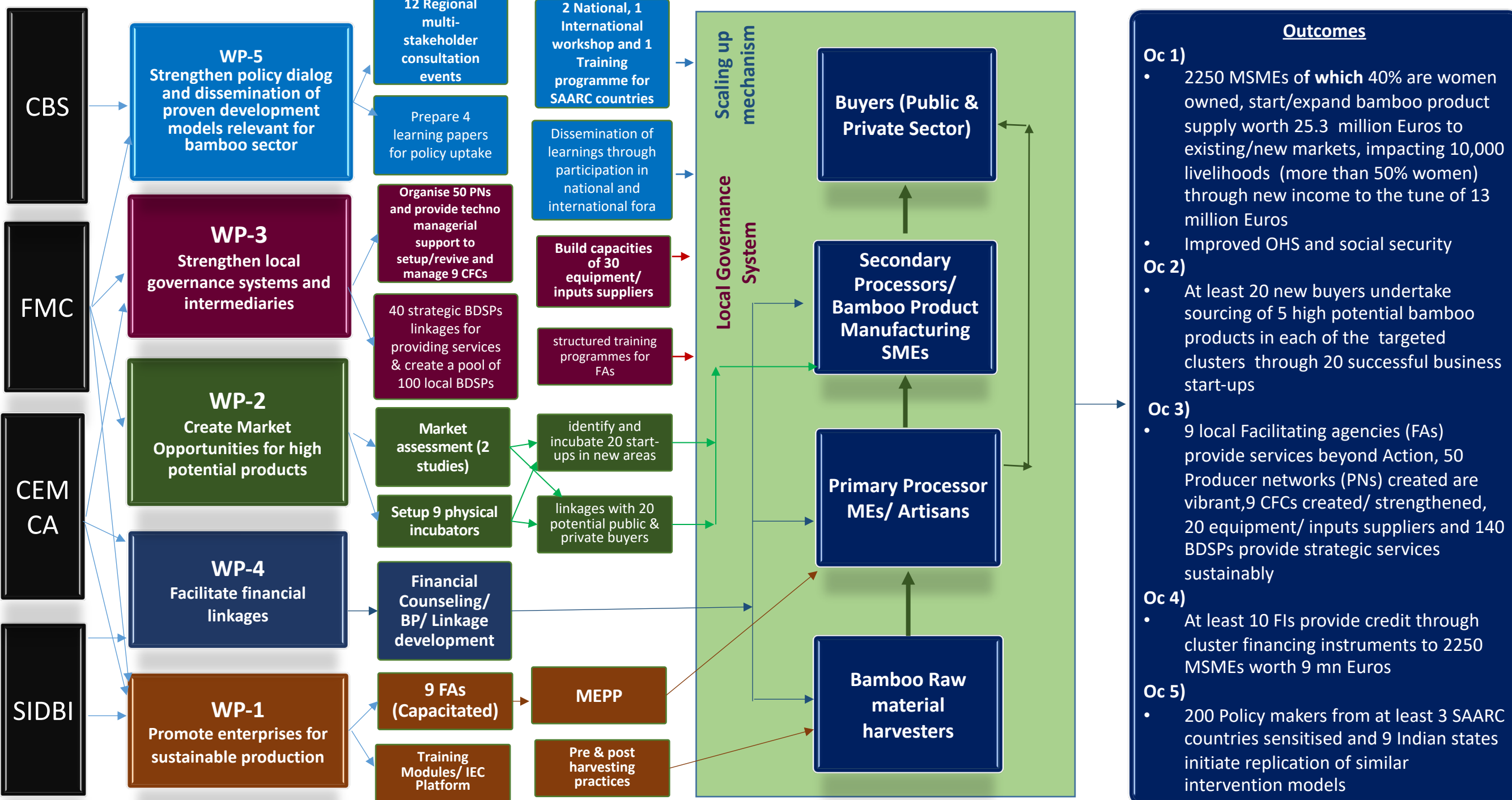
Bamboo 4 SD in India

Overall objective	Baseline (2018- reference year)	Targets
Contribute to promoting green economy and economic prosperity of the tribal India	<ul style="list-style-type: none"> -Estimated turnover: 300 million Euro -Estimated jobs in bamboo processing MSMEs in India is 3 million of which women are more than 50% -Estimated substitutable market of unsustainable resources with bamboo in India is 2 billion Euro 	<ul style="list-style-type: none"> -Increased turnover by 300% by 2028 leading to additional institutional - credit offtake of 300 million Euros in more than 100 such existing clusters -Increased green & sustainable jobs by 100% by 2028 of which more than 50% will be women -25% of the unsustainable product market in India replaced with bamboo products

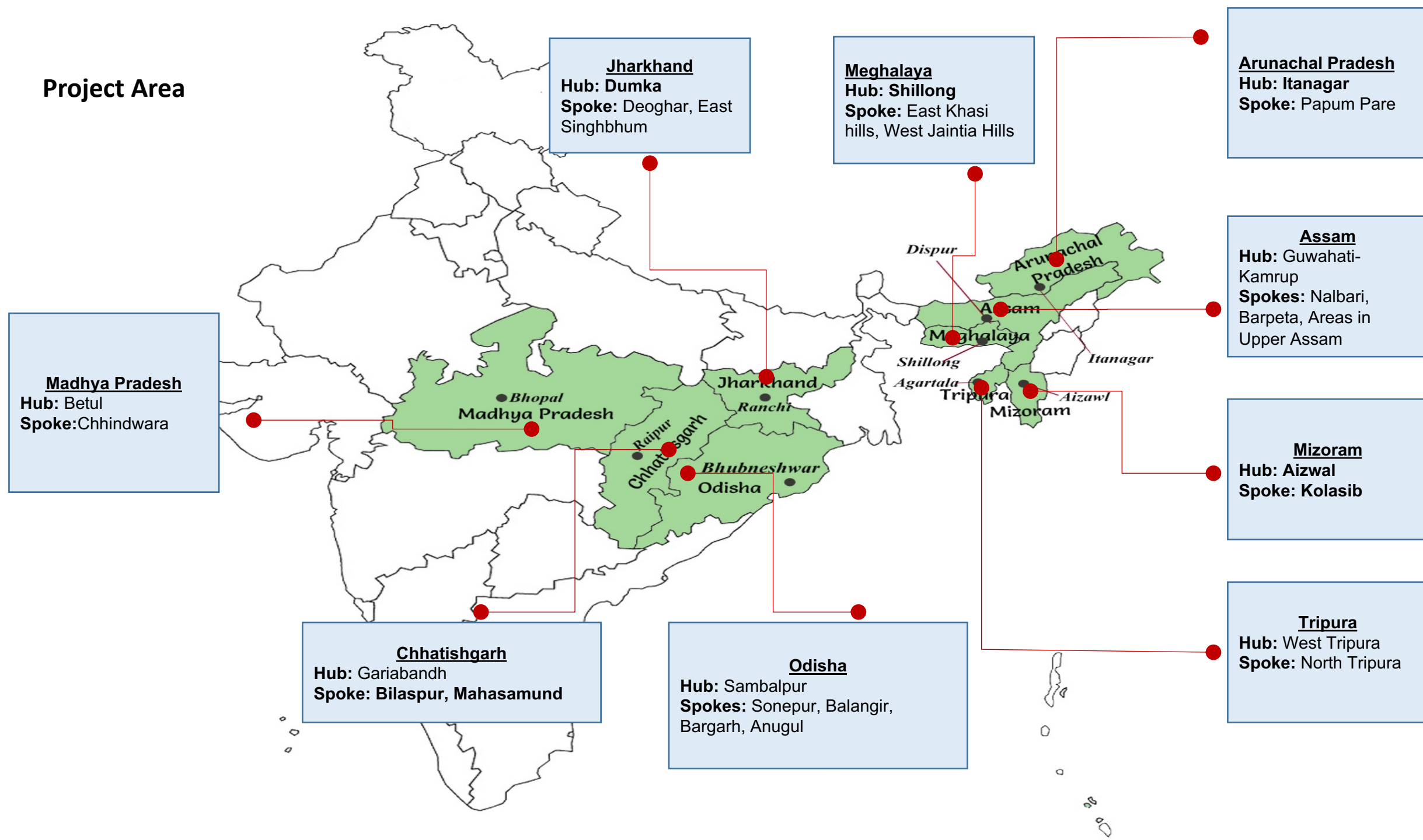
Specific objectives:

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



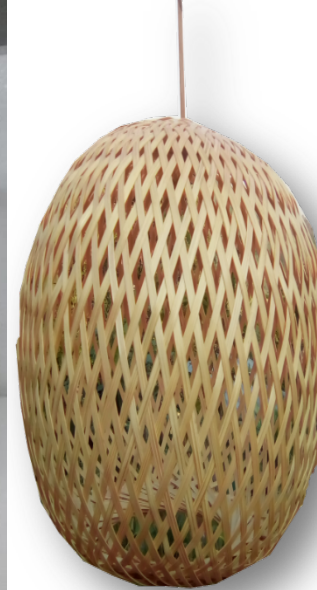


Project Area



Existing Products





Newly developed Products

