

National Bamboo Mission

Under the Ministry of Agriculture, Government of India

Cane and Bamboo Technology Centre



- Bamboo Technology Support Group (BTSG)
under National Bamboo Mission



Cane & Bamboo Technology Centre
Guwahati, Assam, India

An NEC supported organisation

Bamboo Technology Support Group for East & North Eastern States
under The Ministry of Agriculture, Government of India

National Bamboo Mission

The National Bamboo Mission is a Centrally Sponsored Scheme which is being implemented by the Division of Horticulture under the Department of Agriculture & Cooperation in the Ministry of Agriculture, New Delhi at a cost of Rs. 568.23 crores with 100% assistance of the Centre, during the period from 2006-07 to the end of the XIth Plan. The National Bamboo Mission aims at the holistic development of bamboo sector in India. The thrust of the Mission is on an area based regionally differentiated strategy for both forest and non-forest areas. A number of activities are being supported for increasing productivity and quality of bamboo by increasing area under bamboo cultivation, mass production of superior quality planting stock of high yielding species of bamboo, improvement of the existing stock, pest and disease management, improved post harvest management and development and upgradation of marketing facilities. The expected benefits of implementation of the Mission includes coverage of 1.76 lakh ha area under bamboo plantation over a period of 5 years, employment generation of 50.4 million mandays of work by bamboo plantation related activities alone and about 9.7 lakh mandays in bamboo nursery sector.

What is CBTC ?

BAMBOO RULES every aspect life in eastern and northeastern India. Strong, lightweight, durable and tensile, this versatile grass has traditionally been used in these regions for almost everything – from basic needs to adornment, from birth to death. And it has been a source of livelihood for many an ethnic community. But even an abundant natural resource – these regions grow over 80 per cent of India's bamboo – needs sustainability, technical inputs and value-addition. So Cane &



Bamboo Technology Centre was born to help the Northeast and East bank on bamboo.

Though conceived earlier, the Cane & Bamboo Technology Centre originated in 2000 as part of

www.bamboobazar.com



This site is a single stop shop for bamboo products.

This web based application has two distinct parts. One is the bamboo bazar where different bamboo products are displayed category wise and the other is a Database Management System which is divided into three parts, i.e. **Action Plan Management, Units Monitoring and Markets Management.**



Core Competencies of CBTC

Cane and Bamboo Technological Upgradation and Networking Programme of United Nations Development Programme (UNDP). The programme also involved the Department of Science & Technology (DST), Govt. of India and United Nations Industrial Development Organization (UNIDO). After completion of UNDP project in 2004, CBTC was registered under the Societies Registration Act, 1860. Today, CBTC is one of the premier organizations in India working towards promotion of cane and bamboo technology in the North East Region and is playing a vital role in promoting bamboo as one of the prime natural material for the development of economy, generation of employment and protection of environment in this region. CBTC is a nodal institution for bamboo technology and skills development. The institution has been offering technology development services in the region through consultancy and training courses to industries/entrepreneurs and other groups. CBTC is also the implementing Agency for the North East Regional Bamboo Mission (NERBaM), launched by the North Eastern Council (NEC).

- A hub for information and technologies for project partners and stakeholders.
- A link for specialized institutions in India and abroad to strengthen existing institutions by enhancing their networking capacities.
- A vehicle for multi-disciplinary approach from handicrafts to hi-tech applications of cane and bamboo - housing, floorings, furniture, panels, wooden frames, veneers and boards.

- Manpower development and Training - A training institution for craftsman, entrepreneurs and trainers.
- A coordinator for technical, legal and economic policies to increase the uses and trade in cane and bamboo at national and international levels.
- A catalyst to promote economic development using cane and bamboo as a prime resource.
- Facilitating Technology Transfer
- Providing Consultancy to Small & Medium Entrepreneurs
- Resource Centre for information on Cane and bamboo, Cane and bamboo Crafts, Cane and bamboo Industrial products etc.
- Design Centre for new and innovative Bamboo & Cane Handicrafts items



CBTC as BTSG

The Department of Agriculture & Co-operation under Ministry of Agriculture, Government of India has launched the “National Bamboo Mission” (NBM) for addressing the issues relating to the development of bamboo in the country. The National Bamboo Mission is a 100% Centrally Sponsored Scheme and the cost of the Mission is estimated at Rs. 568.23 Crore. The National Bamboo Mission is being implemented in almost all the

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states of the country including all the eight North Eastern States.

In order to technically support the National Bamboo Mission, four Zonal Bamboo Technical Support Groups (BTSG) have been identified and CBTC, Guwahati has been designated as BTSG for all the eight North Eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura along with four eastern states of India – Bihar, Jharkhand, Orissa and West Bengal.







Core Purposes of BTSG

- To assist the NBM in implementing the Mission Activities as per schedule in the field level.
- To plan and frame strategies for implementation of the Mission Objectives in respective states.
- To disseminate the technical knowledge to the respective states for effective implementation.
- To achieve the Mission Benefits as projected.

Major Role and Functions of CBTC as BTSG

- To visit the concerned states frequently and provide guidance in policy, organizational and technical matters
- To compile materials for conduct of regional workshops on bamboo plantations, handicraft, bamboo marketing and exports
- To conduct studies on different aspects of bamboo
- To assist the states in capacity building programmes
- Undertake publicity campaigns to promote the Mission Objectives
- To document and disseminate case studies of success stories
- To conduct specialized Training Programmes at the regional level
- To network with various stakeholders and Institutes/ Organizations/ Agencies, both in India and abroad



Services provided by CBTC as BTSG under NBM

Imparting Training to Farmers

As a BTSG under National Bamboo Mission (NBM), CBTC has been providing training to progressive bamboo growers, lead farmers, artisans / entrepreneurs, SHGs etc. The course content for the training programmes cover varied subjects like methods of bamboo planting techniques and propagation, nursery bed preparation, macropoliferation, disease management, economics of bamboo, etc.

Till June 2008, 13 Farmer's Training Programmes have been conducted by CBTC in 7 States and a total of 413 farmers were trained.

Imparting Training to Field Functionaries

As per the mandate of BTSG under National Bamboo Mission (NBM), CBTC also imparts training to Field Functionaries from both Forest and Non Forest Areas. The target groups are DFO, Ranger, Forester, etc. for



Forest Areas and Agriculture & Horticulture officer, Block Development officer, officials from Panchyat Raj Institutions (PRIs), NGOs, etc. for Non Forest Areas. The course content of the training programmes includes economic importance of bamboo, nursery bed preparation, propagation, plantation techniques, pest and disease management, etc.





Also field visits to nurseries and industrial units are organized.

CBTC has already conducted 9 Field Functionaries Training programmes covering participants from 8 North Eastern states and 3 Eastern states (Orissa, West Bengal & Jharkhand) and altogether 399 Field Functionaries were trained under this programme.

Certification of Bamboo Nurseries developed under National Bamboo Mission

One of the major components of the National Bamboo Mission is to increase




the coverage area under bamboo plantation by an additional 176,000 hectares with economically important bamboo species. In order to ensure supply of quality bamboo planting material, it is necessary to get them certified by the competent authority. Few selected bamboo species have been recommended which are having high commercial value and high yield and also fast growing in nature. As a Certifying Authority, CBTC identifies the planting material as recommended in the Operation Guidelines of the National Bamboo Mission. The Bamboo Planting Material Certification is designed to secure, maintain and make available standard quality bamboo planting material to produce superior crop with desired traits. So far, Bamboo Nursery Certification has been completed in seven states viz. Nagaland, Manipur, Mizoram, Arunachal Pradesh, Uttarakhand, Orissa and Sikkim.

Training Manual Design & Printing

As part of its continuing endeavour to disseminate knowledge, CBTC has developed a Training Manual on Nursery Raising, Commercial





Propagation, Preservation and Primary Processing of Bamboo in five languages – English, Hindi, Bengali, Assamese and Oriya. The translation of the training manual into other languages has also been initiated. Moreover, a “Handbook on Bamboo” is also developed by CBTC under this National Bamboo Mission.

Centralized Publicity Campaign

For wider publicity of the National Bamboo Mission, CBTC has been given giving advertisement in the Newspaper, Magazines and Electronic Media. Besides these mass media, Posters, Brochures and other forms of publicity have also been used so as to spread more awareness among the mass and involve as many people as possible in the National Bamboo Mission.

Organizing International Level Seminars

For example, an International Level Seminar was held at ICAR complex, PUSA, New Delhi during 15 to 17 April 2008. Bamboo EXPO was also organized concurrently at the same venue and for this about 30 stalls were erected. About 14 foreign experts and 25 Indian experts presented papers during this seminar.

Exposure and Educational Trip to “Bamboo Developed Countries”

CBTC had coordinated a visit to China for about 7 officials, led by Shri S. Regupathy, MoS, MoEF, Govt. of India during from 23 to 27 January 2008.

Participation in Domestic and International Trade Fairs





BTSG-CBTC participated in one Domestic trade fair of the KVIC organized by Nagaland Gandhi Ashram from 13 to 17 November 2007 at Mokokchung, Nagaland. It also participated in the India International Trade Fair (IITF) held at Pragati Maidan, New Delhi from 14 to 27 November 2007 under the banner of the National Bamboo Mission. CBTC Also attended the Environment Partnership Summit-cum-Expo 2008, held at Kolkota from 14 to 16 February 2008.

Model Bamboo Handicraft units

Support for three handicraft units was

proposed with an estimated amount of Rs. 90 Lakhs and Rs. 28 Lakhs has been sanctioned by NBM. Till date an amount of Rs. 17 lakhs has been released to CBTC-BTSG and this amount has been disbursed to Rhino Bamboo Industries, the only Bamboo unit in the entire country manufacturing bamboo product like bamboo blinds, bamboo mats etc. The same was expended for upgrading the machineries so as to make the unit competent in making inroads into the global market.

Model Bamboo Cluster Development

CBTC-BTSG has initiated the formation and development of bamboo clusters. The sites have been identified in Nalbari district of Assam and formation of the cluster is already underway. Construction for setting up of a bamboo treatment plant and a Common Facility Centre (CFC) at Janogog village in Nalbari district is also progressing.





NORMS OF ASSISTANCE FOR PROGRAMMES UNDER NATIONAL BAMBOO MISSION



Sl. No.	Programme	Estimated Cost	Revised pattern of assistance
A 1.	Research & Development Research on: a. Harvesting & Sustainable b. Developing new Bamboo Agro forestry techniques c. Bamboo & Livelihood	Project based -do- -do-	100% to Public / Private Sector Institutes -do- -do-
B 1.	Plantation Development Planting Material (Forest Area)		
	A. Centralized Nurseries i Public Sector (0.25 ha) ii. Private Sector (0.25 ha)	2.73 lakhs 2.73 lakhs	100% assistance subject to a maximum @ Rs. 2.73 lakhs per Nursery. 25% of cost subject to a maximum of Rs. 68,000 each as credit linked back ended subsidy.
	B. Nurseries in Private Sector i) Kisan Nurseries (0.10 ha) ii) Mahila Nurseries (0.10 ha)	Rs. 26,000/- per unit Rs. 26,000/- per unit	25% of cost subject to a maximum of Rs. 6,500/- per Nursery. 25% of cost subject to a maximum of Rs. 6,500/- per Nursery.
2	Planting Material (Non-Forest Area)		
	A. Centralized Nurseries i) Public Sector (0.25 ha) ii) Private Sector (0.25 ha)	2.73 lakhs 2.73 lakhs	100% assistance for subject to a maximum @ Rs. 2.73 lakhs per Nursery. 25% of cost subject to Rs. 68,000 each as credit linked back ended subsidy
	B. Nurseries in Private Sector i) Kisan Nurseries (0.10 ha) ii) Mahila Nurseries (0.10 ha)	Rs. 26,000/- per unit. Rs. 26,000/- per unit.	25% of cost subject to a maximum of Rs. 6,500/- per Nursery. 25% of cost subject to a maximum of Rs. 6,500/- per Nursery.
3	Funds for Certification of Planting Material	Project based.	100% assistance to Public/Private Sector Institutes.

Sl. No.	Programme	Estimated Cost	Revised pattern of assistance
4	a. Tissue Culture Units in Public Sector b. Tissue Culture Units in Private Sector	Rs. 21.00 lakhs per TC unit Rs. 21.00 lakhs per TC unit	100% assistance to PSUs, maximum of Rs. 21.00 lakh. 50% assistance subject to a maximum of Rs. 10.50 lakhs as credit linked back ended subsidy at par with Technology Mission for the Development of North-Eastern Region (TMNE)
5	Area Expansion (Captive Plantation)		
	a) Forest Area b) Non Forest Area	Rs. 25,000/ha Rs. 16,000/ha	100% assistance in two equal installments. (50:50) 50% of cost subject to a maximum of Rs. 8,000 per ha subject to the limit 4 ha per /beneficiary.
6	Improvement of Existing Stock	Rs. 8000/ha	100% assistance subject to the limit 2 ha per beneficiary for non-forest area.
7	Technology Transfer & HRD a. Training of Farmers/entrepreneurs b. Training of Field Functionaries c. Demonstration of Plantation Technology	Project Based Project Based Project Based	Rs. 1520/- per participant for within State; Rs. 2500/- each outside State of seven days. Rs. 8000/- per participant for a period of seven days. 50% of cost subject to a maximum of Rs. 10,000/ha. for a maximum area of 0.50 ha per beneficiary.
	d. Workshops/ Seminars/Training i) International Level ii) National Level iii) State Level iv) District Level	Project Based Project Based -do- -do- -do-	100% assistance. 100% assistance subject to a maximum of Rs.40 lakhs. 100% assistance subject to a maximum of Rs.5.00 lakh per event of two days. 100% assistance subject to a maximum of Rs.3.00 lakh per event of two days. 100% assistance subject to a maximum of Rs.1.00 lakh per event of two days.

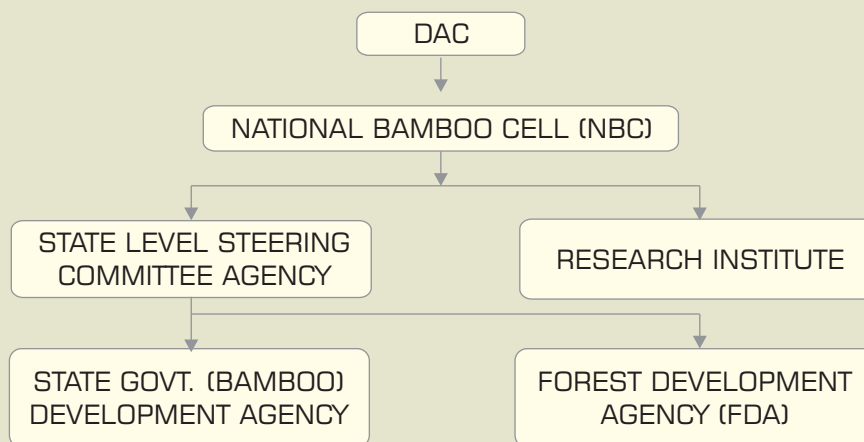


Sl. No.	Programme	Estimated Cost	Revised pattern of assistance
8	Pest and Disease Management at the Plantation Level	Rs. 400 ha	50% of cost subject to a maximum of Rs. 200/- per beneficiary per ha to a limit of 2 ha for non-forest area.
9.	Innovative Interventions	Project Based	100% assistance
10.	Post harvest storage and treatment facilities	Project based	100% assistance subject to maximum of Rs.20 lakh per unit
11.	Micro-Irrigation in Non Forest Area	Rs.40,000 ha	50% of cost subject to a maximum of Rs. 20000/- per ha to a limit of 4 ha. per beneficiary.
C.	Handicrafts, Bamboo Marketing and Exports		
1.	Bamboo Wholesale & Retail Markets a. Bamboo Wholesale & Retail Markets near Villages	Rs. 16.00 lakhs per unit	25% of cost subject to a maximum of Rs. 4.00 lakh for general areas and 33.33% of cost subject to a maximum of Rs. 5.33 lakh for Hilly/Tribal area.
	b. Bamboo Bazars	Rs. 27.00 lakhs per unit	25% of cost subject to a maximum of Rs. 6.75 lakh for general areas and 33.33% of cost subject to a maximum of Rs. 9.00 lakh for Hilly/Tribal area.
	c. Retail Outlets (Showrooms)	Rs. 40.00 lakhs per unit	25% of cost subject to a maximum of Rs. 10.00 lakh for general areas and 33.33% of cost subject to a maximum of Rs. 13.33 lakh for Hilly/Tribal area.
	d. Innovative interventions	Project Based	100% assistance
2.	Participation in Domestic Trade Fairs	Project Based	75% of cost (Rs.3.75 lakh) for an event of 2 days @ Rs.5 lakh per event.
3.	Participation in International Trade Fairs	-do-	75% of cost (Rs. 7.5 lakh) for an event of 5 days @ Rs. 10.00 lakh per event.
4.	Conducting of Market Surveys, etc.	-do-	100% of cost.
D.	Implementation Monitoring Mechanism		
1	National Bamboo Cell		
	a. Evaluation and Monitoring	Project Based	100% of cost
	b. Bamboo Technical Support Group	-do-	100% of cost for engaging consultancy for specified task in specified period.
	c. Coloured Brochures and Leaflets	-do-	100% of cost.

Sl. No.	Programme	Estimated Cost	Revised pattern of assistance
	d. Promotional campaigns through Electronic/ Audio-visual Media/ Newspapers	-do-	100% of cost.
	e. Database Generation & Management (Information, Web Based Database)	-do-	100% of cost to Central / State level institution ICAR/ICFRE etc.
2	State Implementation Bodies Project Report Preparation, Consultancy.	-do-	Up to 1.5% of the project cost.

Annexure 2

SCHEMATIC DIAGRAM SHOWING FLOW OF FUND



Annexure 3

OVERALL TARGETS UNDER NATIONAL BAMBOO MISSION

S.No	Programmes	X Plan	XI Plan	Total
1.	Area Expansion			
	a) Forest Area	16,000 ha.	72,000 ha.	88,000 ha.
	b) Non-Forest Area	16,000 ha.	72,000 ha.	88,000 ha.
2.	Nurseries - Centralized	160 nos	185 nos	345 nos
	a) Kisan	50 nos	30 nos	80 nos
	b) Mahila	50 nos	30 nos	80 nos
3.	Improvement of Existing Stock	7,500ha.	28,500 ha.	36,000 ha.
4.	Tissue Culture Units	1 nos	2 nos	3 nos.
5.	Bamboo Bazaars	71 nos.	124 nos.	195 nos.
6.	Retail Outlets (Show-Rooms) in 10 Metropolitan cities	3 nos	7 nos	10 nos





Arunachal Pradesh : The State Mission Director, Director, State Forest Research Institute (SFRI), Govt. of Arunachal Pradesh, Department of Environment & Forest, Post Box No. 159, Van Vihar, Chimpu, Itanagar 791 111, Phone : 0360-2203566/ 2203508

Assam : The State Mission Director, C/o CCF (RE & WP), Assam, 15, Prasanta Path, RG Baruah Rd., Guwahati - 781 024, Phone : 0361 - 2457886, Fax : 0361 - 2450102

Manipur : The State Mission Director, Conservator of Forest, O/o the PCCF, Govt. of Manipur, Sanjengthong, Imphal - 795 001, Phone : 0385-2450165, Fax : 0385-2452504

Meghalaya : The State Mission Director, Principal Chief Conservator of Forests, O/o the Principal Chief Conservator of Forest, Government of Meghalaya, Lower Laichumiere, Risa Colony, Shillong - 793 001, Phone : 0364-2220414, Fax : 0364-2504068

Mizoram : The State Mission Director, Conservator of Forest, Northern Circle cum Nodal Officer, Bamboo Devpt. Cell, Dept. of Environment & Forests, Govt. of Mizoram Tuikhuahtlang, Aizawl, Mizoram, Phone : 0389-2326025, Fax- 0389-2322733

Nagaland : The State Mission Director, Office of the Nagaland Bamboo Development Agency, Red Cross Building, Nagaland - 797001, Kohima, Phone : 0370-2221140, 229415 / 2224255 / 2224069

Orissa : The State Mission Director, Orissa Bamboo Development Agency, A/84, Kharvel Nagar, Bhubaneswar 751 001, Orissa, Phone : 0674-2533408, Fax : 0674-2535934

Sikkim : The State Mission Director, C/o P.D. cum Secretary, Horti and Cash Crop Devpt. Deptt., Govt. of Sikkim, Krishi Bhawan, Tadong, Gangtok-737 102, Telefax- 03592-231892

Tripura : The State Mission Director, Chief Conservator of Forests (Planning & Development), Department of Forests and Wildlife, Government of Tripura Aranya Bhawan, Gorkha Basti, P.O. Kunjaban 799 006, Tripura (W), Agartala, India, Phone : 0381-2325575/ 39/ 2326874

For details and further information, please contact:

Cane and Bamboo Technology Centre

(Bamboo Technology Support Group under National Bamboo Mission)

Mother Teresa Road (Zoo-Narengi Road), Narikal Basti, Guwahati – 781 021, Assam, India

Phone: 0361-2410242, 2410886; Fax: 0361-2410250

Email: btsg_cbtc@yahoo.co.in, info@caneandbamboo.org

Website: www.caneandbamboo.org