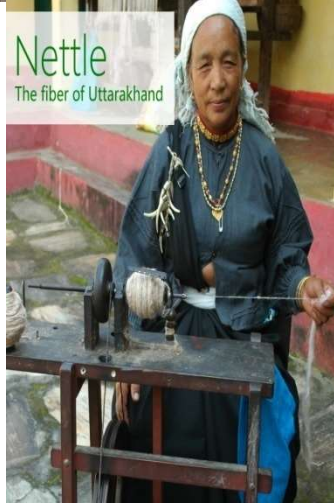


Administrative Report-2019-20



Members of the Board as on 31 March 2020

S.No.	Name	Occupation	Position in the Board
1	Dr. Om Prakash	Additional Chief Secretary, Agriculture Production Commissioner, GoUK	Chairman Ex-Officio
2	Mr. Arvind Singh Hyanki	Secretary, Forest and Environment GoUK,	Vice Chairman Ex- Officio
3	Ms. Manisha Panwar	Principal Secretary, Rural Development, GoUK,	Member Ex-Officio
4	Mr. Jairaj	Principal Chief Conservator of Forests (HoFF),Uttarakhand	Member Ex-Officio
5	Mr. Monish Malik	Managing Director, Uttarakhand Forest Development Corporation, Dehradun	Member Ex-Officio
6	Mr. Manoj Chandran	Chief Conservator of Forests/Chief Executive Officer	Member Secretary
7	Dr. Rajendra Dobhal	Director, Uttarakhand State Council for Science & Technology	Member Ex-Officio
8	Mr. Arun Pandhi	Chief Programmes,Sir Ratan Tata Trust, Mumbai	Member
9	Dr.Rajesh Thadani	Agriculture & Forestry Consultant, Sir Ratan Tata Trust, Mumbai	Member
10	Dr. Anil Joshi	Director, Himalayan Environmental Studies and Conservation Organization (HESCO) Dehadun	Member
11	Mr. Rajeev Oberoi	CEO, Society of People for DevelopmentDehadun	Member

Executive Summary:

A remarkably versatile resource, with over 4000 known uses, bamboo has especially caught the fancy of the world as a substitute to wood and various associated products. Its other utilization as a food, fuel, and scaffolding material, filtration medium and bio-fuel all help contribute to its escalating demand. The bamboo and natural fibers both can contribute significantly towards generating rural self-employment through the range of handicrafts enterprises that can be facilitated through its use. Requiring intensive management bamboo needs many more hands to contribute to the cultivation, harvesting, preservation and value addition compared to other industrialized processes. Consequently bamboo and natural fibers has the potential to absorb vast numbers of rural people in vocational areas ranging from plantation, processing to crafting and thereby mitigating migration from remote rural areas, which is a grave problem in Uttarakhand. This is precisely the reason why only developing countries find it viable to be engaged in this sector while developed countries become the consumptive markets for the end-products. At the same time bamboo and ringal can greatly contribute to the watershed, embankment protection, erosion control and slope stabilization measures, much needed in the State.

To promote bamboo and natural fiber based livelihood options on a mission mode the Uttarakhand Bamboo and Fiber Development Board (UBFDB) is consistently trying to create community owned enterprise development so that that the resultant income generated could accrue directly to the rural communities. Given that bamboo has the potential to simultaneously contribute to the economic, social and ecological security UBFDB has demonstrated the ability of bamboo and natural fibers to address a variety of needs. These include - sustainable resource development, soil and water conservation, carbon sequestration, livelihood security, earthquake safe and aesthetic housing, and rural handicraft enterprise development.

The year 2019 was important in terms of multifunctional progress, in which the National Bamboo Mission played an important role to accelerate the bamboo based activities in the State. To develop quality bamboo planting material, 1 hi-tech nursery and 06 big nurseries were developed in govt. sector while 02 big nurseries were developed in private sector. Further in this episode, a total of 513 ha bamboo plantation in government sector on community/waste land was carried out with the field support of various forest divisions while 41 ha bamboo/ringal plantation was carried out in private sector. To improve post-harvest management through establishment of innovative primary processing units near the source of production, two bamboo treatment and seasoning plants in government sector were sanctioned and being established by the Uttarakhand Forest Development Corporation.

For encouraging private sector in bamboo based enterprise development two proposals were sectioned for establishing bamboo furniture and skewers/chopsticks making units under the provision of back ended subsidy by the National Bamboo Mission. Under the activity of market and promotion of bamboo handicrafts being produced by the artisans/entrepreneurs, a total of 4 souvenir shops and 03 bamboo bazaars were established in prime tourist locations of the State. With a view to promote and market the bamboo and natural fibre products participated eight trade fairs and exhibitions organised by various departments and organisations.

Uttarakhand Bamboo and Fiber Development Board (UBFDB)

Achievements in 2019-20

Project: National Bamboo Mission

Sponsored by: Central Govt. and State Govt. (funding ratio 90:10)

Status: In progress

Objectives:

1. To increase the area under bamboo plantation in non forest Government and private lands to supplement farm income and contribute towards resilience to climate change as well as availability of quality raw material requirement of industries. The bamboo plantations will be promoted predominantly in farmers' fields, homesteads; community lands, arable wastelands, and along irrigation canals, water bodies etc.
2. To improve post-harvest management through establishment of innovative primary processing units near the source of production, primary treatment and seasoning plants, preservation technologies and market infrastructure.
3. To promote product development keeping in view market demand, by assisting R&D, entrepreneurship & business models at cooperative, micro, small and medium levels and feed bigger industry.
4. To rejuvenate the under developed bamboo industry in India.
5. To promote skill development, capacity building, awareness generation for development of bamboo sector from production to market demand.
6. To realign efforts so as to reduce dependency on import of bamboo and bamboo products by way of improved productivity and suitability of domestic raw material for industry, so as to enhance income of the primary producers.

A) Resource Building- Nursery Development

With the support of the National Bamboo Mission, one high-tech nursery with the capacity of 50000 bamboo plants per year was established at Marjari in Badkot Range of Dehradun Forest Division. Facilities like Mist chamber and hardening chambers have been established and the nursery is being developed as a mother nursery, where from the bamboo saplings will be supplied to other small and Kisan Nurseries in the coming years.

Moreover, six big nurseries were established in Govt. sector while two big nurseries and one small nursery were established in private sector as per the details given below:

Nurseries in Govt. Sector-

SL. No.	Type of nursery	Place	Managing by
1	Hi-tech Nursery (2 ha.)	Majri-Badkot Range	Dehradun Forest Division.
2	Big Nursery (1 ha.)	Chidiyapur-Haridwar	Haridwar Forest Division.
3	Big Nursery (1 ha.)	Kotdwar	Lansdowne Forest Division Kotdwar.

4	Big Nursery (1 ha.)	Langha-Kalsi	Soil Conservation Forest Division Kalsi
5	Big Nursery (1 ha.)	Ladpur-Dehradun	Uttarakhand Bamboo and Fiber Development Board
6	Big Nursery (1 ha.)	Gaindikhata-Haridwar	Gujjar Vikas Samiti Gaindikhata
7	Big Nursery (1 ha.)	Pathari- Haridwar	Eco Vikas Samiti Gujjar Basti Gandikhata
8	Small Nursery (0.5 ha.)	Village- Markhoda	Gram Panchayat- Markhoda (Pauri Garhwal)_

Nurseries in Private Sector:

SL. No.	Type of nursery and capacity	Name and address of beneficiary
1	Big Nursery (1 ha.)- 25000 plants	Smt. Sargam Preet Kaur, Village-Bakhpur, P.O Suryanagar Kichha (US Nagar)
2	Big Nursery (1 ha.) - 25000 plants	Smt. Anita Patwal Indira Nagar Dehadun Uttarakhad.

The various nursery activities are under progress in all these nurseries. The various major species currently being grown in these nurseries are *Bambusa balcooa*, *Bambusa tulda*, *Oxytenanthera parviflora*, *Bambusa bambos*, *Thrysostachys olivieri*, *Dendrocalamus hamiltonii*, *Dendrocalamus strictus*, *Dendrocalamus asper*, etc. Around one lakh plants are available in these nurseries ready for planting and have been allocated for plantation activities during the coming monsoon season. 7kg of seeds of *Bambusa polymorpha*, *Bambusa tulda* and *Dendrocalamus hamiltonii* etc. flowered in north east region was procured and is being raised at Ladpur nursery in Dehradun.





Nursery Development Activities

Bamboo and Ringal Plantation:

During the year 2019, a total of 461.93 hectares of bamboo and ringal plantation was established in Van Panchayat/Community/farmers and private land. This area covered by plantations will be able to generate raw material for the local artisans and entrepreneurs who are engaged in ringal and bamboo based enterprise development. The plantations carried out will not only provide immediate raw material to the artisans but has also helped increase the forest cover, plantations of bamboo on land slide prone areas will be further helping reduce landslides and help in restoring the ecological balance.

B) Plantation under National Bamboo Mission:

Plantation in Govt. land:

Sl. No.	Plantation Area	Area in (ha)
1	Haridwar Forest Division (Roorkee,Bahadarabad)	31
2	Soil Conservation Forest Division Kalsi	53
3	Additional Soil conservation Forest Division Ramnagar	100
4	Lansdowne Forest Division	100
5	Soil Conservation Forest Division Lansdowne	50
6	Narendra Nagar Forest Division	90
7	Village Khumati (Pithoragarh)	08
	Total	461.93

Plantation in private land:

S.No	Name of beneficiaries	Plantation in ha.
1.	Kirti Saran Aggarwal S/O Shri Pradeep Kumar Village- Kamaluaganja, Narsinghtala Tahsil- Haldwani, District- Nainital- 263139 (Uttarakhand), Mobile No- 9837162262	1.00
2.	Dilwar singh Pawar S/O Late Shri Balwant Singh Village-Bura Ghat, Chamoli- 246435, Mobile No- 9917565011	0.80
3.	Raghunath Singh Bisht S/O Late Shri Dhan Singh Bisht, Village- Peb, Post- Develkot, District- Chamoli, Uttarakhand- 246640 Mobile No- 9917324670	0.84
4.	D.T.C India Limited, Midford House Mandir Marg Vasant Vihar enclave, Dehradun-248006, Mobile Number- 9897273707, Phone Number- 0135-2764322	20.00
5.	Kamal Singh S/O Shri Jhawar Singh, Village- Koti, Patti- Banal, Post- Pujeli, Tahsil- Barkot, District- Uttarkashi-249141, Mobile No- 8755980711	2.315
6.	Shri Ranvir Singh S/O Shri Vikarm Singh Rawat, Village- Sarnol, Post- Sarnol Tahsil- Barkot, District- Uttarkashi- 249141, Mobile Number- 249141, 7500659101,9458945254	2.00
7.	Jaidev Singh Pawar Vllage- Kund, Patti- Banal, Post- Pujeli,Tehsil- Barkot, District- Uttarkashi-249141, Mobile No- 7895100501	2.00
8.	Smt. Usha Bhatt W/O Shri Prayag Dutt Bhatt, Village& Post- Gopeshwar, District- Chamoli-246424, Mobile No- 8057904439	0.5
9.	Shri Satish Chandra Bhatt S/O Shri Ram Prasad, Village- Dharkot, Badiyar Patti Badiyargrah, Kirti Nagar, Tehri Garhwal-249161	0.48



Bamboo
Plantation
Activities under
Different Projects



C) Promotion of Bamboo Treatment and Preservation:

Under the mission, one seasoning plant has been sanctioned at Bibiwala near Rishikesh for the Garhwal region, run by the Uttarakhand Forest Development Corporation, where a bamboo treatment plant is already in existence. Another treatment plant has been allotted in the Kumaon Terai Region (Nainital dt) also to be run and maintained by the Uttarakhand Forest Development Corporation.

D) Establishment of processing units of value addition of Bamboo

An advertisement for inviting application/project for establishing bamboo product development and processing was published in daily news papers Amar Ujala and Dainik Jagran. Against the advertisement, a total of 10 proposals for Establishment of processing units of value addition of bamboo, Management of bamboo waste in primary processing units, Handicrafts/cottage industry, furniture making, Jewellery making, incense stick making, common facility centre have been received from the interested entrepreneurs. As per the guideline of the National Bamboo Mission the funding provision is in the form of credit linked back ended subsidy. It implies that the beneficiary has to avail term loan from scheduled Banks / recognized Financial Institutions. Till now, one proposal of processing units of value addition of bamboo, one proposal management of bamboo waste in primary processing and one proposal of bamboo furniture making unit have been received and first instalment of subsidy has been released to the respective banks.

E) Promotion and Development of Infrastructure for Bamboo Market

1. Establishment of bamboo depots and godowns

Under the APO 2018-19, one godown has been sanctioned and the amount has been released in the favour of Uttarakhand Forest Development Corporation for the same. The godown is being established adjacent of seasoning and treatment plant at Bibiwala near Rishikesh.

2. Promotion of bamboo mandi and e-trading

One bamboo mandi has been allotted to Western Circle at Haldwani, who has proposed an international bamboo market centre at Golapaar, Haldwani. Additionally, efforts to develop e-trading of bamboo and bamboo products has also been started. The process has started with the registration of artisans, industrialists, experts in bamboo housing, furniture designers, etc. The e-trading platform will also connect all the bamboo bazars, rural haat and bamboo mandi across the state created under this project and also those not covered under this project.

3. Rural Haat

To bridge the gap between rural craftsmen and urban affluent consumers two rural haats have been sanctioned, one at Chidiyapur (Haridwar Forest Division) and the other at Paniyali, Kotdwar (Lansdowne Forest Division). The requisite amount has been released in favour of the aforesaid forest divisions. These haats would enable villagers to sell their bamboo and also various products.

4. Bamboo Bazar

To showcase/sell/promote of bamboo products developed by the artisans groups and cooperatives mechanism like bamboo bazaars have been created. Under the program six bamboo bazaars have been sanctioned. This includes a souvenir shop at Eco-park Dhanolti Mussoorie (Mussoorie Forest Division), a shop at the main gate of Rajaji Tiger Reserve Dehadun, a shop at Dr. Sushila Tiwari herbal garden Rishikesh, a shop at FTI Haldwani, a shop at Dhangadi gate Corbett Tiger Reserve and another at Indira Nagar Dehadun has been managed by the Uttarakhand Bamboo and Fiber Development Board under a rent MoU executed for the same. The requisite amount has been transferred to the respective implementing agencies.



F) Skill Development and Awareness Campaign:

1. Training Field Functionaries and Staff:

A team of 7 staff of UBFDB and one bamboo based entrepreneur were sent to Bangalore to participate in the Bamboo Art Exhibition conducted by URAVU in the first week of May 2019. It was also clubbed with the visit to GrowMore Biotech. Additionally, a study tour of Kerala was conducted, in which two participants from Uttarakhand were visited Kerala Bamboo Fest, 2019 and other bamboo based enterprises in Kerala.

Learning from exposure and study tour:

1. Proper raw material mechanism is an essential part to promote community owned enterprise development.
2. Constant technical and handholding support to the artisans/producer groups at initial stage is needed for sustainable development.
3. Common facility centers should be developed for backward and forward linkage in association with local institutions.

4. Such a system should be developed so that craftsmen get their wages on time.
5. Generating continues market demand is key for sustainable development.



Bamboo Food Court:



2. Participation in Exhibitions and Trade Fairs:

The UBFDB participated in ten different exhibitions and showcased/sold bamboo and natural fibre based products developed by artisan groups and cooperatives. An

around Rs. 3.00 lakhs sell and order were received during the fairs/exhibitions. The details of exhibitions/fairs are given below:

S.No.	Programm/Event	Date of Participation	Venue	Organizer
1	Word Biodiversity Day	March, 2019	FRI Dehadun	FRI Dehadun
2	Vasantoutsav 2019	March, 2019	Rajbhawan Uttarakhand	Horticulture Department
3	Bamboo Artisans Conclave 2019	18th September to 19 th September 2019	Dumka Jharkhand	Department of Industries Government of Jharkhand
4	Uttarakhand Handicraft Symposium	27th September 2019	Rudrapur Udham Singh Nagar	Department of Industries Government of Uttarakhand
5	Diwali Mela	13th October 2019	Central park, New Motibagh, Ladies Club, Shantipath New Delhi	National Bamboo Mission New Delhi
6	CNI Chandigarh Fair	18th October to 21th October 2019	Prade Ground Sector 17, Chandigarh	Confederation of Indian Industry
7	National Bamboo Mission	21th October 2019	PUSA Delhi	National Bamboo Mission New Delhi
8	Rajpur Nature Festiwal 2019	02nd Navember to 4th November 2019	Shahanshai Ashram, Rajpur Road, Dehradun	Uttarakhand Forest Department Dehradun
9	Doon Haat IT Park	12th December to 16th December 2019	New Doon Haat IT Park Dehradun	Department of Industries Government of Uttarakhand
10	Rajya Pitasin Adhikari Sammelan 2020	17th December to 19th December 2019	Sudhowala Dehradun	Department of Industries Government of Uttarakhand



a. Identification of genetically superior species/varieties

A total of 600 culms of improved and superior quality *Dendrocalamus strictus* and *Dendrocalamus Somdevai (hemiltonii)* developed by Forest Research Institute in association with TFRI, IFP, RFRI and IWST were purchased. Presently, the clumps of *Dendrocalamus strictus* (10) and 3 clumps of *Dendrocalamus somdevai (hemiltonaii)* are being multiplied in Landpur nursery Dehadun by the board.



b. Demonstration plots to exhibit best practice to farmers

A target of three demonstration plots has been allotted in government sector. One demonstration plot is being developed at Ladpur where cultural operations of various species of bamboos, especially *Thrysostachys olivieri* is being demonstrated. Another demonstration plot is being developed at Paniyali, Kotdwar where a bamboo garden is being developed to demonstrate the various species, their cultural operation, nursery techniques and harvest operations. Another

demonstration plot of *Phyllostachys pubescens* is proposed to be established, for which site selection is under process.



Harvest of *Thyrsostachys olivieri*



Name of Project: Bamboo Resource Development Project (State Sector Programme)

Sponsored by: Govt. of Uttarakhand

Status: In process

Objectives: Create bamboo resource in key bamboo growing areas.

A total of 95 ha. bamboo/ringalplantation completed in 03 forest divisions including Alaknanda Soil Conservation division, Gopeshwar, soil conservation Uttarkashi and Forest Division Nainital. Additionally, a total of 340 ha. bamboo plantation sites are under maintenance as per the details given below:

Sl. No.	Name of divisions	Area in (ha)
1	Kedarnath Wild life Forest Division Gopeshwar	90
2	Forest Division Nainital	15
3	Forest Division Tehri Dam-II Uttarkashi	50
4	Forest Division Tehri	55
5	Soil Conservation Forest Division Uttarkashi	30
6	Forest Division Tehri Dam-II Uttarkashi	55
7	Forest Division Champawat	45
	Total	340



Plantation under Soil conservation forest division Kalsi

Name of Project: Himalayan Nettle Fiber Processing and Standardisation

Sponsored by: UNDP under SECURE HIMALAYA Project

Status: In Progress

Objective:

- Standardize harvesting system of nettle fiber
- Reduce the usage of fuel wood in processing
- Reduce the usage of water in processing
- Reduce the drudgery associated in processing to the extent possible
- Improve the overall value chain associated in processing.

Under the project, collection of 40kg. nettle ribbon (raw fiber) of different growth periods was collected from Gangoti and Govind Pashuvihar landscape. The research and development project is being carried out in collaboration with Clothing and Textiles Department College of Home Science, GBPUAT for which an MoU has been executed. The R&D work is under progress.

Collection of nettle fibre of different growth periods



Name of Project: Ringal and Natural Fiber Based Enterprise Development Project

Sponsored by: Uttarakhand Gramya Vikas Samiti- ILSP (IFAD)

Status: Completed

Objectives:

- Developing nettle based resources by introducing nettle plantation and cultivation in community land and private land as well.
- Transforming artisan's skills and capacities into sustainable micro enterprises
- Demonstrating and disseminating plant fiber & ringal based micro enterprise technologies.
- Establishing a community owned plant fiber and ringal based enterprises.
- Establishing market access
- Enhancing income level of artisans/weavers.

Project area: The project was implemented in 08 clusters viz. Mori, Bhatwari, Dunda, Purola- (Uttarkashi), Dasholi, Dewal and Ghat (Chamoli) Kapkot (Bageshwar) of Uttarakhand. under the project a total of 1300 artisans and weavers of 95 villages were benefited.

Outcomes of the Project:

1. Cluster Development Awareness campaign:

- Base line survey of 08 clusters was conducted to assess the existing resources such as Himalayan nettle, hemp, Bhimal, ringal and traditional artisans.
- Over a period of 3 years duration of the Project a total 543 meetings and induction programmes were organized in 95 villages.
- Project Specific IEC material Developed to distribute artisans/SHGs/Cooperative
- Over the project period a total of 1300 artisans were benefited under the project activities.
- A total of 08 Community Facility Centers were established with the facilities of store and necessary equipments/utensils.

2. Nettle Seed Collection and sowing (Broad Casting):

- Under the project, 80 kg. Nettle seed was collected and sowed in 95 hectare in Van Panchayat and community land of 08 clusters.
- An average 75 percent seed germination was observed/recorded.

3. Raw Fiber Collection and Processing:

- A total of 17508 kg. Nettle, hemp and bhimal fiber was collected and processed.
- Made 8000 yarn and manufactured 5000 Meter fabric

4. Training and Skill Up-gradation:

- During the project period a total number of 427 artisans/weavers were trained on various product materials like ringal/natural fibers.
- Out of 427 artisans/weavers, 189 women artisans and 238 male artisans were trained in ringal and natural fiber activities.
- More than 20 Master trainers developed in the project area for Natural Fiber, ringal handicrafts
- The economy status of the artisans has changed. They raised their economic status by earning almost from zero to a minimum of Rs. 500 and many other up to a maximum of Rs. 2000 and above per month.
- Thinking process of artisans has changed, now they never assumes them as an inferior person but they feel proud they are the person who are carrying on the traditional legacy of the crafts.

5. Design Development:

- During the project period 39 designs were developed with the support of design experts. 24 designs were developed for ringal while other 15 designs were developed for natural fibers.
- All developed designs; market tested and found good response.

6. Marketing Promotion and Exhibition:

- During the project period participated 37 trade fairs and melas in the state and out of state by putting the stall and showcased finished products made by the artisans.
- To increase the level of community participation, enterprise building and market network 4 self reliant cooperative were formed while 4 federations adopted.
- The cooperative societies have become a major source of marketing of the production and almost all the artisans are selling their products through these societies.
- Cooperatives have been linked with marketing companies' viz. Studio Alaya Dehradun, Himjoli Delhi, Bamboo store New Delhi, BOHECO Mumbai, Naini International, Compact buying Service, Eskay Gurugram and Vititti Design Mumbai.
- For selling and showcasing the bamboo and natural fiber's products, 1 shop was opened in Indirangar, Dehradun.
- Products are being marketed with the help of forest department at Eco-tourism park Dhanolti (Dehradun)
- Through participation in the trade fair and other efforts by cooperative, business was made worth of Rs. 45,40,000

7. Other Prominent & Innovative Initiative:

- Under the Rajiv Gandhi Shilp Swasthya Bima Yojna being implemented by ICICI Lombard, a total number of 231 SHG members from 21 SHGs of 12 Villages are insured and health cards were given to them with the support of DC handicrafts.

Project Highlights:



Nettle Seed Collection: In order to increase the raw material availability, a total of 15 kg. nettle seed was collected from Ghat clusters and sown in Sital Vanpanchayat of Ghat Block (Chamoli) with strip sowing methods. The plantation and resource generation of the Himalayan nettle from the areas of harvesting was carried out by the primary processing unit beneficiaries, the beneficiaries

were trained initially in the strip sowing and harvesting technique.

Seed sowing activity:



Training and Capacity Building:

Under the project, 30 formal training cum production workshops were conducted in ringal (Hill Bamboo) and Bamboo based handicrafts while 6 trainings were conducted on nettle fiber processing and value addition. A total of 427 artisans/weavers from 8 clusters viz. Mori (Uttarkashi), Dunda (Uttarkashi), Bhatwadi (Uttarkashi) and Kapkot (Bageshwar) were trained. During the training programmes 20 new designs were developed in ringal handicrafts and 10 designs were developed in nettle and hemp fibers, which routinely tested in local and national trade fairs and exhibitions and received good response from the consumers.

Glimpses of Training and Design development workshops:



Training programme at Shama Village of Bageshwar



Other prominent initiatives undertaken by the Board:

A 15 days art and craft training to the Students of 30 secondary government schools & KGBVs was conducted with the financial support of Uttarakhand Sabhi ke liye shiksha parishad Samagra Shiksha, Uttarkhand. Under the training programme a total of 30 training programme were organised and trained more than 660 students in ringal and bamboo based handicrafts items.

Glimpses of the training programmes:





Internship and Industrial Attachment:

Uttarakhand Bamboo and Fiber Development Board has been a preferred organization for the students and professionals of crafts design, textile design and forestry. So far, the board has trained several students and entrepreneurs in bamboo and natural fiber based activities. In 2019, 16 students from different college/Institutes took training from the UBFDB as details below:

Ms. ReyanaHasija: Ms. ReyanaHasija a student of B.des. 3rd year from Indian Institute of Crafts and Design Jaipur undertook two months industrial training with Uttarakhand Bamboo and Fiber Development Board from 3rd June to 3rd August, 2019. During the internship programme she undertook exposure visit to CFC Kotdwar and SamgamChatti Cluster Uttarkashi. She has also developed many market focused product in bamboo and ringal including bamboo jewellery, baskets and other utility items and trained to the artisan groups.



Ms. SoumyaAgarwal: Ms. SoumyaAgarwal being student of B. Design (Fashion Design) 1st year, Graphic Era Hill University, has completed four week Summer Project with Uttarakhand Bamboo and Fiber Development Board from 3rd June to 3rd July 2019. She undertook exposure visit to Common Facility Center (Mangroli), district Chamoli and developed and designed a bag using nettle fibre.

Ms. PreetiTripathi: Ms. PreetiTripathi a student of B.Sc. Forestry 7th semester, HNB Garhwal University Srinagar, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 20 October, 2019 to 19 November, 2019. During the attachment, she undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development. She also carried out market survey of the artisans and shopkeepers who deals in bamboo.



Ms. Divya Kala: Ms. Divya Kala a student of B.Sc. Forestry 7th semester, HNB Garhwal University Srinagar, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 20 October, 2019 to 19 November, 2019. During the attachment, she undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development. She also carried out market survey of the artisans and shopkeepers who deals in bamboo.

Ms. ArchanaNegi:Ms. ArchanaNegi a student of B.Sc. Forestry 7th semester, HNB Garhwal University Srinagar, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 20 October, 2019 to 19 November, 2019. During the attachment, she undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development. She also carried out market survey of the artisans and shopkeepers who deals in bamboo.



Ms. Shiwalika:Ms. Shiwalika a student of B.Sc. Forestry 7th semester, HNB Garhwal University Srinagar, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 20 October, 2019 to 19 November, 2019. During the attachment, she undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development. She also carried out market survey of the artisans and shopkeepers who deals in bamboo.

Ms. AyushiNegi: Ms. AyushiNegi being student of M.Sc Wood Science and Technology, FRI Deemed to be University Dehradun completed her industrial attachment training with Uttarakhand Bamboo and Fiber Development Board from 5th November, 2019 to 05 December, 2019. During the attachment period she learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development.



Ms. JyotiPapola: Ms. JyotiPapola being student of M.Sc Wood Science and Technology, FRI Deemed to be University Dehradun completed her industrial attachment training with Uttarakhand Bamboo and Fiber Development Board from 5th November, 2019 to 05 December, 2019. During the attachment period she learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development.



Mr. Satish: Mr. Satish being student of M.Sc Wood Science and Technology, FRI Deemed to be University Dehradun completed her industrial attachment training with Uttarakhand Bamboo and Fiber Development Board from 5th November, 2019 to 05 December, 2019. During the attachment period she learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development.



MsKanupriyaKanwar: Ms. Kanupriyakanwar being student of B.Sc. Forestry, Uttarakhand PG College of Bio-Medical Sciences and Hospital Dehradun, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 18 November, 2019 to 18December, 2019. During the attachment, she undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development. She also carried out market survey of the artisans and shopkeepers who deals in bamboo.



MsShiwaniPanchal: Ms. ShiwaniPanchal being student of B.Sc. Forestry, Uttarakhand PG College of Bio-Medical Sciences and Hospital Dehradun, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 18 November, 2019 to 18 December, 2019. During the attachment, she undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development. She also carried out market survey of the artisans and shopkeepers who deals in bamboo.



Mr. RavindraRawat: Mr. RavindarRawat being student of B.Sc. Forestry 7th semester, HNB Garhwal University Srinagar, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 18 November, 2019 to 18 December, 2019. During the attachment, he undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development.

Mr. BhavneshDhiman: Mr. BhavneshDhiman being student of B.Sc. Forestry 7th semester, HNB Garhwal University Srinagar, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 18 November, 2019 to 18 December, 2019. During the attachment, he undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species, bamboo storage and treatment methods, handling tools and machines and product development.

Mr. SurajParmar: Mr. SurajParmar being student of B.Sc. Forestry 7th semester, HNB Garhwal University Srinagar, has completed one month industrial attachment with Uttarakhand Bamboo and Fiber Development Board from 18 November, 2019 to 18 December, 2019. During the attachment, he undertook exposure visit to CFC Kotdwar, FRI Dehradun, Ladpur Nursery Dehradun and learned identification of bamboo species,

bamboo storage and treatment methods, handling tools and machines and product development.

Mr. SidharthSaxena: Mr. SidharthSaxena being student of B. Design, Indian Institute of Craft and Design undertook his one month internship with Uttarakhand Bamboo and Fiber Development Board Dehadun from 4th December 2019 to 2nd January, 2020. During his internship he visited to common facility center kotdwar and Pipalkoti (Chamoli) and developed/designed a bunk bed, bedside table, stackable table, coat hanger and hanging table with the theme of a dormitory.

Ms. RiyaSorathiya: Ms. RiyaSorathiya being student of B. Design, Indian Institute of Craft and Design undertook his one month internship with Uttarakhand Bamboo and Fiber Development Board Dehadun from 4th December 2019 to 2nd January, 2020. During his internship she visited to common facility center kotdwar and Pipalkoti (Chamoli) and developed/designed a bunk bed, bedside table, stackable table, coat hanger and hanging table with the theme of a dormitory.

Exposure visit:

A group of students of B.Sc Forestry, Dolphin (PG) Institute of Biomedical & Natural Sciences visited to Natural Fiber Center at UBFDB Dehradun and obtained technical know-how about potential natural fibres in Uttarakhand.



A group Photograph with students and faculty of Dolphin Institute

Bamboo Tree Guard Supply: 200 bamboo tree guards were supplied to Garhwal forest division form CFC Kotdwar.



Bamboo pegs/poles supply:

35000 pegs/poles of *Dendrocalamus strictus* supplied to DFO Uttarkashi for use as stakes for geotextile based landslide stabilization in Diarabugyal



Bamboo based Schools

Got Uttarakhand Cabinet decision on construction of bamboo based disaster resistant buildings for 5000 primary schools. AnMoU between Education Department and Uttarakhand Bamboo and Fiber Development Board has been signed and initially, the work of making detail project report of 8 schools has started.



Model of proposed bamboo school

Salient Features of Bamboo Schools:

- Earthquake Resistance/Disaster Safe /Environment friendly
- Low cost/Low Maintenance
- Local Employment/Local resources/Student Friendly

उत्तराखण्ड बांस एवं रेशा विकास परिषद् की गतिविधियों को संचालित करने हेतु विषय विशेषज्ञों का इम्पैनलमेंट (Empanelment) करने के सम्बन्ध में।

उत्तराखण्ड बांस एवं रेशा विकास परिषद् द्वारा संचालित परियोजनाओं तथा गतिविधियों को सुचारू रूप से संचालित करने हेतु समय-समय पर विषय विशेषज्ञों की आवश्यकता होती है, जिसमें मुख्यतः बांस गृह निर्माण, डिजायन विकास, वेब डिजाइनिंग, दस्तावेजीकरण एवं अनुश्रवण, कानूनी सलाहकार, चार्टर्ड एकाउन्टेन्ट, बांस एवं रेशा पर आधारित व्यापार संबर्द्धन, प्राकृतिक रेशा एवं वस्त्र तकनीकी/अभियांत्रिकी, मैकेनिकल सेवाएँ सम्मिलित हैं। विषय विशेषज्ञों को परिषद् में **इम्पैनल (Empanel)** करने हेतु इच्छा की अभिव्यक्ति सम्बन्धित सूचना दैनिक समाचार पत्र अमर उजाला तथा टाइम्स ऑफ इण्डिया में विज्ञापन प्रकाशित कर व्यक्तिगत/फर्मस्/संस्थानों से आवेदन पत्र आमंत्रित किये गये। सुयोग्य कंसल्टेंट्स/फर्मस्/संस्थाओं को परिषद् से **इम्पैनल (Empanel)** कर भविष्य में आवश्यकता के अनुसार असाइनमेंट (**Assignment**) के आधार पर सेवाएँ ली जानी प्रस्तावित है। वर्तमान में बांस भवन निर्माण कार्य हेतु एक इम्पैनलमेंट कार्यशाला का आयोजन कर कतिपय व्यक्तियों/फर्मों को इम्पैनल किया गया है। शेष कार्यो हेतु कार्यवाही गतिमान है।

Clusters Developed by the Board and facility available:

S. No.	Artisan Facility Cluster	Number	Available facility
1	Common Facility Center PaniyaliKotdwar	1	Bamboo treatment, furniture making, charcoal, gassifier, waste material bricketingmachine , machinery, other equipments and storage.
2	PaonTalla, Mori Uttarkashi	1	A common facility center on rent was established with facility like storage, fiber processing utensils and necessary tools for ringal handicrafts. However, artisans are working from home for ease of resource accessibility and distance factor.
3	KandiyalGaon, Purola (Uttarkashi)	1	A rented storage facility was developed at village Ponti (Purola) where nettle fiber is being processed by the artisans.
4	BharangaonDunda (Uttarkashi)	1	Storage facility, fiber processing utensils, small hand tools for ringal handicrafts.
5	GajoliBhatwadi (Uttarkashi)	1	Storage facility, fiber processing utensils, small hand tools for ringal handicrafts.
6	SitelGhat (Chamoli)	1	One rented room for storage facility; required utensils and processing inputs are arranged there.
7	ErathaDewal (Chamoli)	1	Permanent working shade, store, Basic tools
8	Supi (Bageshwar)	1	Permanent working shade, store/display/sale point. Basic tools available.One rented room for storage atRithaBagarh (Kapkot);need based utensils and processing inputs are arranged there.
9	PipalkotiDasholi (Chamoli)	1	An Artisans facility center has been developed at PipalkotiChamoli, where the artisans work together with the technical support of UBFDB Staff. The local cooperative federation named as RingalUtpadakSwayatSahkarita is also promoting the display and marketing through shop on Badrinath Highway at Pipalkoti.
10	Udham Singh Nagar	4	4 permanent structures, one made with bamboo and 3 concrete structures have been constructed under different projects at Sitarganj and Khatima. Need based machinery and equipments are available in these CFCs.
11	Village Mangroli (Chamoli)		A permanent structure with the facility of fiber processing and weaving.

Cooperative Associated with UBFDB:

Sl. No.	Name of Cooperative	Cluster	Members associated with cooperatives
1	SahshtradharaRingalSwayatSahkarita Ltd. Village-Supi Block Kapkot (Bageshwar)	KapkotBageshwar	70
2	Himalayan Self Reliant Cooperative Pipalkoti (Chamoli)	Dasholi (Chamoli)	123
3	RinagalUdpadakEvamHastshilpVikarSwayattSahkaritaBhankoli (Uttarkashi)	Bhatwadi and Dunda	64
4	PindariSwayattSahkarita Village Boragad (Chamoli)	Dewal (Chamoli)	124
5	KedarKanthaSwayattSahkaritaNetwad (Mori)	Netwad (Mori)	230
6	Rama SiraiAjeevikaSwayattSahkarita	KandiyalGaon (Purola)	56
7	RanaTharuSwayattSahkaritaSitarganj (Udham Singh Nagar)	Sitarganj	300
8	MaharanaTharuSwayattSahkarita (Khatima)	Khatima	75

UBFDB Team:

S. No.	Name	Designation
1	Dr. Om Prakash IAS	Chairman/ACS/Agricultural Production Commissioner
2	ShriManoj Chandran IFS	Chief Conservator Forest/CEO
3	Shri Dinesh Joshi	Manager Programme/Livelihood
4	ShriPradeep Sati	Marketing Manager
5	ShriJaspalNegi	Account
6	ShriMukesh Singh	Admin. Assistant
7	ShriShashiBhushan Bhatt	Marketing Assistant
8	ShriAkash deep	Office Assistant
9	ShriGiriraj Pal	Master Trainer (Housing)
10	ShriAshish Prasad Sati	Field Supervisor
11	ShriVikramSingh	Field Supervisor
12	ShriSurendraFarshwan	Field Supervisor
13	Shri Manoj Joshi	Nursery Incharge/Asst. Training
14	ShriMahaveer Singh	Supervisor CFC
15	ShriFirtu ram Devangan	Master Trainer (Fiber)
16	Shri Rajesh Lal	Mater Trainer (Bamboo &Ringal)
17	ShriRanpallal	Mater Trainer (Bamboo &Ringal)
18	ShriVipinPanwar	Field Supervisor
19	ShriPradeep Kumar	Field Assistant
20	Shri Ganga Singh	Field Assistant
21	Ms. Shweta Sharma	Computer Operator
22	ShriVivekBhatt	Assistant CFC
23	ShriMahaveer Singh	Office Driver
24	Shri Man Mohan Singh	Office Driver
25	ShriMahaveer Singh	Office Driver
26	ShriHawaldar Singh	Orderly
27	ShriDevendra Kumar	Orderly
28	Ms. Sumitra Devi	Assistant
29	Ms. Tulsi Devi	Nursery Assistant
30	Ms. Babita Devi	Nursery Assistant