

75  
Azadi Ka  
Amrit Mahotsav



# Promoting Livelihoods in North East India

Sustainable Cane and Bamboo  
Cluster Development Project

Phase II

North East Cane and Bamboo  
Development Council



# What's inside?

1

Project Review

2

About NECBDC

3

Project Roadmap

4

Stakeholder Outlay

5

Map of Phase II clusters

6

Distribution of Bamboo  
Species

7

Details of clusters and project  
activities

8

Project Milestones

9

Success Stories

10

Impacting SDGs



# 1. Project Overview

The 'Cane and Bamboo Cluster (CAB)' project funded by the North Eastern Council (NEC), Ministry of DoNER, Government of India, was implemented by NECBDC. The aim of the project was to promote sustainable livelihood in the Northeast India. The CAB project was implemented in two phases. The first phase of the project was implemented by United Nation Industrial Development Organization (UNIDO) along with NEC, Department of Industrial Policy and Promotion (DIPP) and Development Commissioner (Handicrafts) and NECBDC. The Phase I of the project was concluded in August 2013 under which five clusters were formed.

The Phase II of the project was commenced in 2018 under which 11 new clusters were formed. This project covers 16 clusters, two in each of the 8 North Eastern states. Furthermore, few potential clusters were also adopted under the project.



## 2. About NECBDC

The Northeast Cane and Bamboo Development Council (NECBDC), erstwhile Cane and Bamboo Development Council (CBTC) was formed under the aegis of North-eastern Council, Ministry of DONER in the year 2000, as a project office for implementation of United Nation Development Program (UNDP) funded project ***“Cane and Bamboo Technological Up-gradation and Networking Project”***.

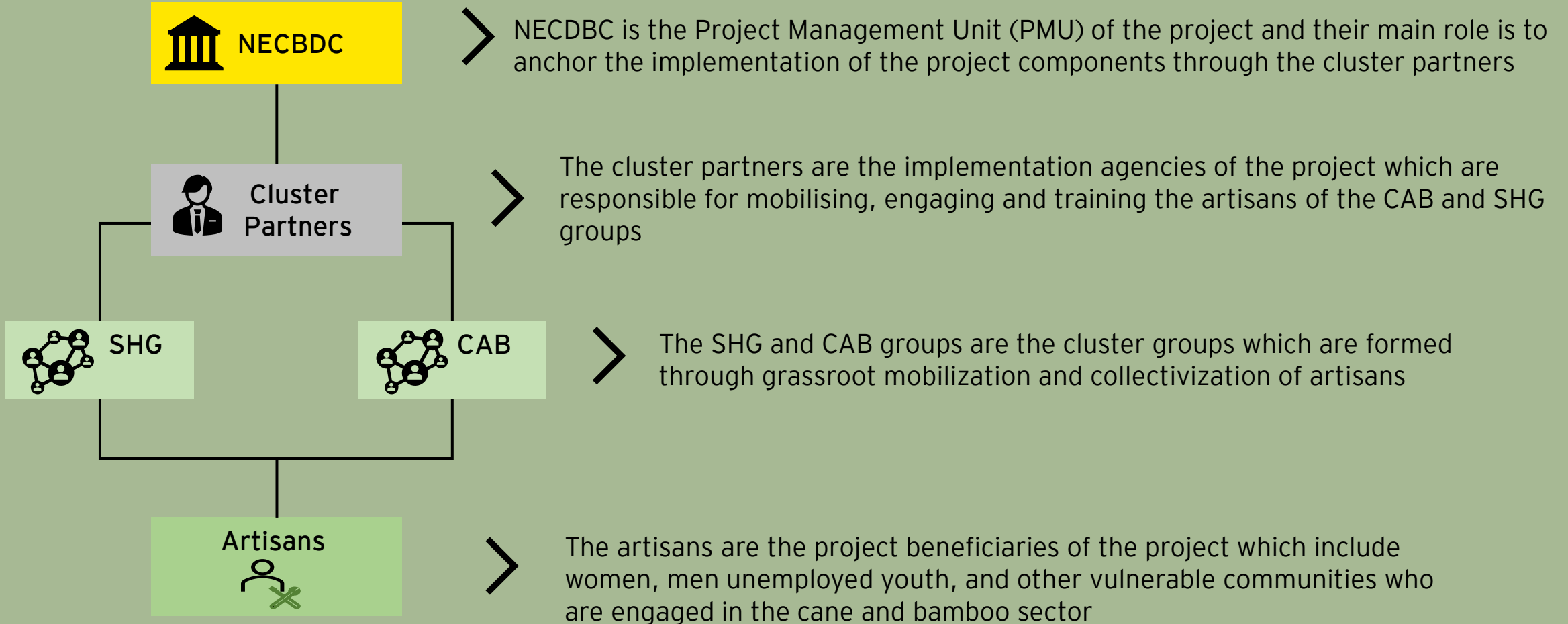


NECBDC was established with the purpose of organizing Northeast India's previously untapped bamboo sector, which has long been a part of the region's topography, culture, and traditional practices. Bamboo is abundantly available in Northeast and is home for 93 species of bamboo, accounting to more than 30% of the country's bamboo stock<sup>2</sup>. NECBDC has facilitated for the emergence of a new paradigm by promoting bamboo-based livelihoods specially in the rural areas.

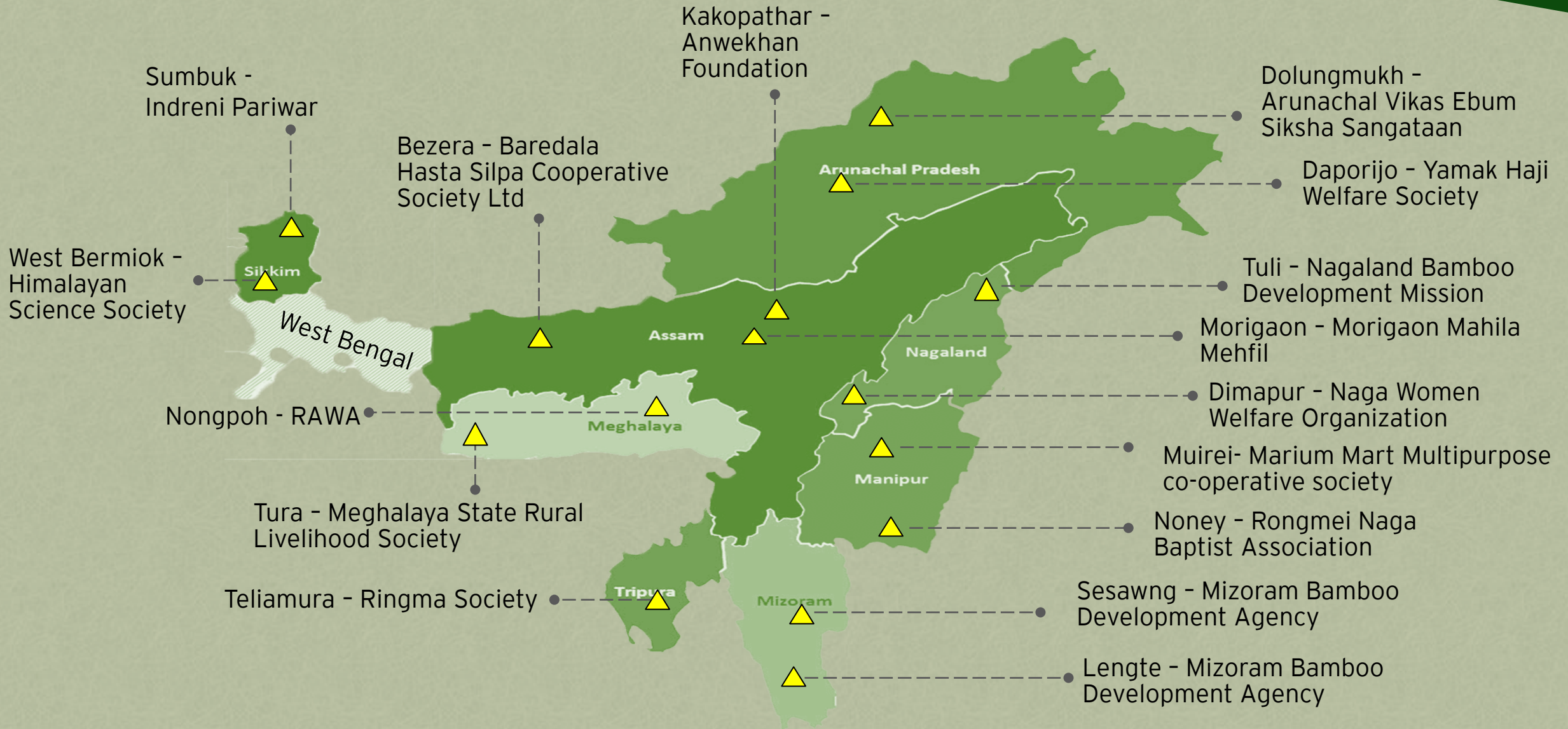
# 3. Project Roadmap



# 4. Stakeholder Outlay



# 5. Map of Phase II Clusters



## 6. Distribution of bamboo species

Bamboo Species <sup>2</sup>	Popular Products	Arunachal Pradesh	Assam	Manipur	Mizoram	Tripura	Meghalaya	Sikkim	Nagaland
Bambusa tulda	Furniture	✓		✓		✓	✓	✓	✓
Dendrocalamus hamiltonii	Fermented bamboo shoots		✓	✓	✓	✓			✓
Melocanna baccifera	Mats and baskets		✓		✓	✓			
Bambusa bambose	Construction, furniture	✓	✓	✓	✓	✓	✓		✓
Bambusa nutans	baskets, fences, roof tiles	✓	✓	✓	✓	✓			✓
Bambusa balcooa	Agarbatti sticks, edible shoots	✓	✓			✓	✓		✓



## 7. Details of the clusters and activities





Assam is also called the land of blue hills and it is located in the central plains of Northeast India with an average altitude of about 1868m<sup>3</sup>. The capital of Assam, Guwahati is the gateway to other northeast states. The state has a well established cane and bamboo market and is also well connected to markets of the other metropolitan states in India and countries like Bangladesh and Bhutan through land custom centres.

Having abundant bamboo resources and being one of larger producers of bamboo in north east, the state contains approximately 17.53% of total bamboo bearing area under forests in the country<sup>2</sup>. Since generations, cane and bamboo has always been an integral part of the cultural, social, religious and economic traditions of Assam. It is perhaps one of the most universal of all crafts practiced by a large number of artisans throughout the state. Bamboo even holds a religious value in the state as there is a general belief that it possesses a auspicious character and is of religious significance.

Many cane and bamboo products are made using simple machinery in the state and are used for wide range of purposes and extensively used in every household. Some of the traditional products of Assam includes *Jaapi* (leaf head gear), *Chalani* (sieve), *Kula* (winnowing fan), *Khorahi* (small basket), *Dola* (bamboo tray), *Dukula* (big basket), and wide range of fishing gear including *Polo*, *Jakoi*, *Khaloi*, *Chepa* and others.

## 7.1 Assam

- Kakopathar
- Morigaon
- Bezera

# 7.1.1 Kakopathar Cluster

## Cluster at a Glance

- Location - Tinsukia District
- Cluster Partner - Anwekhan Foundation
- Households<sup>1</sup> - 50
- Artisans<sup>1</sup> - 50
- Trained Artisans<sup>1</sup> - 50



## About the Cluster Partner

Anwekhan Foundation was formed in the year 2018. It is registered as a Non Governmental Organisation under Societies Registration Act 1860. The headquarter of the foundation is in Sarumaithang village of the Tinsukia district. The core objective of this foundation is to provide sustainable livelihood options to the unemployed, specially abled and other vulnerable communities of Kakopathar area.

## About the Cluster

Kakopathar cluster is located in the far east of Assam in Tinsukia district. The cluster was formed by unemployed youth of Kakopathar block to engage rural youth of the adjoining villages in cane and bamboo craft for livelihood generation. They are primarily engaged in making cane and bamboo based *furniture, small handicrafts and bamboo ornaments*. The cluster has established their marketing showroom in Tinsukia Arunachal Highway which provides them better business opportunities across Assam borders including Delhi, Kolkata and Thailand.



# Activities

## 4 Capacity Building Training and Workshops<sup>1</sup>

- 1 Product development training<sup>1</sup>
- 1 Industrial design training<sup>1</sup>
- 1 Entrepreneurship Training<sup>1</sup>
- 1 Pre-processing training<sup>1</sup>

## Products Designed

Some of the key products designed in the cluster are light stand, flower baskets, table lamp mobile stands, hangers, cob and wide variety of household furniture



# Glimpses of the cluster



Utility Products



Using modern tools

Traditional Product



Handicraft Products



Artisan working with hand tool



Artisans working in common facility centre

## 7.1.2 Morigaon Cluster

### Cluster at a Glance

Location -Morigaon District

Cluster Partner - Morigaon Mahila Mehfil

Households<sup>1</sup> - 178

Artisans<sup>1</sup> - 30

Trained Artisans<sup>1</sup> - 30



### About the Cluster Partner

Morigaon Mahila Mehfil (MMM) is an NGO working in the development sector with various government departments and international organizations. It is one of the most reputed NGOs in Morigaon District and has its own set up established in Morigaon town. The organization works primarily in the domain of Livelihood Enhancement, Child & Youth Development, Gender, Food & Nutrition, Health and Water and works towards improving economic, moral and social standards of rural communities

### About the Cluster

The Morigaon cluster covers two villages of Manipur Nuagaon and Gucharabori in two blocks. This cluster is a natural cane and bamboo cluster and they have been practicing cane and bamboo craft through generations, making household utilities and fishing gears. The artisan units are operated from households and therefore involvement of the women and youth in the production process is quite common in the cluster. Majority of the artisans in the cluster practice cane and bamboo trade along with agriculture and others



# Activities

## 4 Capacity Building Trainings and Workshops<sup>1</sup>

- 2 Product development trainings<sup>1</sup>
- 1 Production line concepts training<sup>1</sup>
- 1 Exposure trip to showrooms, processing centres and retail outlets<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are baskets, shopping bags, hats, laundry baskets, and lampshade



# Glimpses of the Cluster



Product development training



Design intervention training



Bamboo basket



Hands on training by Master trainer



Bamboo basket



## 7.1.3 Bezera Cluster

### Cluster at a Glance

**Location - Kamrup District**

**Cluster Partner - Baredala Hasta Silpa Cooperative Society Ltd.**

**Households<sup>1</sup> - 303**

**Artisans<sup>1</sup> - 600**

**Trained Artisans<sup>1</sup> - 101**



### About the Cluster Partner

Baredala Hasta Silpa Cooperative Society Ltd was formed by aggregating the artisans of villages in Bezera. The cooperative was formed in the year 2017. The headquarters of the cooperative is located in Baredala village of Kamrup district. The core objective of forming the cooperative was to support the artisans who are members of the cooperative in terms of providing access to working capital, fulfilling their raw material requirement and marketing their produce collectively.

### About the Cluster

Bezera Cluster is located 50 km from Guwahati the capital city of Assam. The cluster has been engaged in bamboo basketry for poultry from the past 25 years. They have established linkages with poultry companies and their products are sold directly from the cluster. In recent past the cluster has also established linkages with an institution from the US for bamboo dustbins



# Activities

## 6 Capacity Building Trainings and Workshops<sup>1</sup>

3 Product development (jewellery and basketry) trainings<sup>1</sup>

3 Exposure trips to showrooms, processing centres and retail outlets<sup>1</sup>

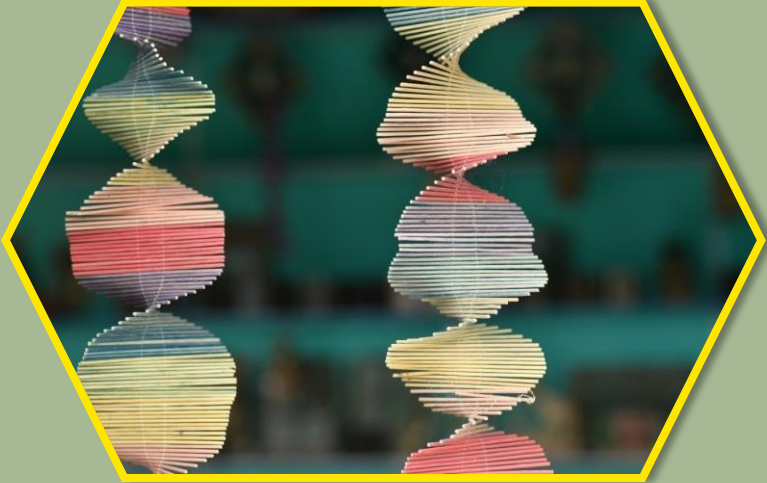


## Products Designed

Some of the key products designed in the cluster are chicken baskets, brooms, cups and wall hangings



# Glimpses of the cluster



Home decor product



Other bamboo products



Cane and bamboo chicken baskets



Cluster artisans



Artisans at work



Utility product



## 7.2 Nagaland

Nagaland is one of the smaller states in India and lies in the hills and mountains of Northeast part of India with an average altitude of 667m<sup>3</sup>. The state is heavily mountainous with evergreen tropical and subtropical forests found in strategic pockets throughout the state. Nagaland is also well connected with Guwahati, Assam which is the gateway to the North East and has a well established market and tourism sector. There also two international highways that pass through the state with possibility of export of various cane and bamboo products to other states in India.

The forests of Nagaland are rich in bamboo and cane resources having about 3947 sq km of the total bamboo area recorded under forests in the country<sup>2</sup>. The cane and bamboo craft of Nagaland is also an age old craft of leisure which was practiced by many artisans in the traditional rural economy of Nagaland. Basketry was among the most developed and popular cane and bamboo products of the state. Its fine detailing and varied intricate weaves are the hallmark of traditional bamboo and cane basketry of Nagaland.

Some of the traditional products of the state include bamboo dish, bamboo saucers, *Angami Naga bamboo spoons*, *Chang bamboo mugs*, *Chang Naga cross bow*, *Konyak Naga belt*, *Phipha* (leggings), ceremonial headgear, *lithuo* (fishing tray), *Kedzu* (hayfork), bamboo flute, bamboo trumpet, the cup violin and others

### Cluster Groups

1. Tuli
2. Dimapur

## 7.2.1 Tuli Cluster

### Cluster at a Glance

Location - Mokochung  
District

Cluster Partner - Nagaland  
Bamboo Development Agency

Households<sup>1</sup> - 1500

Artisans<sup>1</sup> - 100

Trained Artisans<sup>1</sup> - 100



### About the Cluster

The Tuli cluster is located in a remote area of Nagaland and encompasses six villages of Anaki, Anakiyimsen, Soyimlenden, Kantsung and Aitlenden. The households of this cluster used to weave mats for British Garrisons during the pre-independence days and later also supplied the mats to tea gardens in the neighbouring areas. As these sources were no longer there, the cluster has been selling their mats to only small local buyers. With the current intervention the cluster was developed to supply to big buyers like Nano steel and APIL and others

### About the Cluster Partner

Nagaland Bamboo Development Agency (NBDA) is a registered society under Government of Nagaland. The society implements various bamboo development programs and projects with the assistance from the National Bamboo Mission and the National Mission on Bamboo Applications, State Government and other institutions. The main aim of the society is to diversify modernise and expand value added bamboo products, and develop bamboo as means of ecological, economical and social security to livelihoods and the state



# Activities

## 4 Capacity Building Trainings and Workshops<sup>1</sup>

2 Product development trainings<sup>1</sup>

2 Industrial design trainings<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are trays and lampshades



# Glimpses of the cluster



Construction of Common Facility Centre



Entrepreneurship training



Design intervention training



Product development training

## 7.2.2 Dimapur Cluster

### Cluster at a Glance

Location - Dimapur District

Cluster Partner - Naga Women Welfare Organization

Households<sup>1</sup> - 50

Artisans<sup>1</sup> - 100

Trained Artisans<sup>1</sup> - 100



### About the Cluster Partner

Naga Women Welfare Organisation is an organisation which works with mostly the women artisans of rural areas near Dimapur. They focus on timeless designs that innovate decades of traditional bamboo and woodworking craftsmanship. They build skills and knowledge of local communities through intensive training and exposures.

### About the Cluster

The Dimapur cluster enrolls young school dropout girls (16-22 years) and women as key players in the cane and bamboo sector. The cluster's main operations are held in Sovima and adjacent villages. Most of the artisans in the cluster are linked to a bigger umbrella association of Cane Concepts which have buyers from metropolitan cities in India and foreign countries.





# Activities

## 22 Capacity Building Trainings and Workshops<sup>1</sup>

- 4 Product development trainings<sup>1</sup>
- 1 production line concepts training<sup>1</sup>
- 10 Exposure trips to showrooms, processing centres and retail outlets<sup>1</sup>
- 2 Entrepreneurship trainings<sup>1</sup>
- 4 Trade capacity trainings<sup>1</sup>
- 1 Marketing awareness workshop<sup>1</sup>



## Products Designed

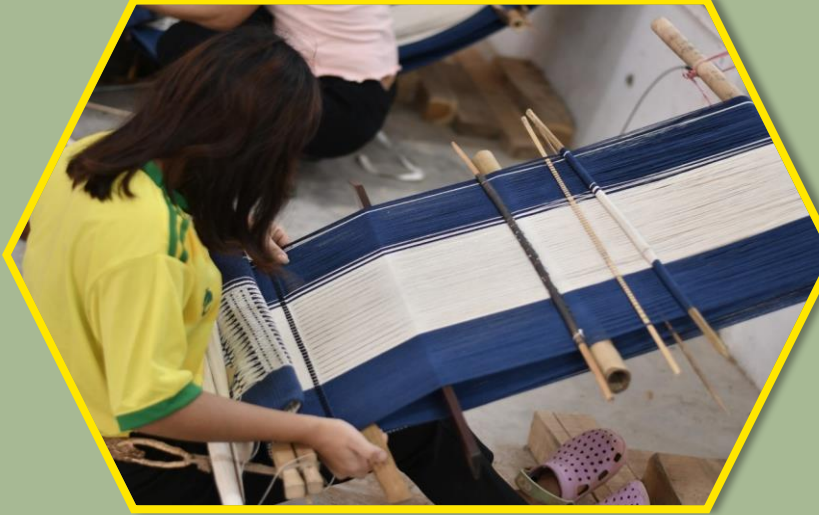
Some of the key products designed in the cluster are cane and bamboo wall art, wall décor and lighting solutions



# Glimpses of the cluster



Cluster artisans working



Bamboo mat



Cane baskets



Chairs developed from Cane



Clusters artisans at work



Cluster artisans with their different weaves

## 7.3 Manipur

Manipur is a landlocked hilly state located in easternmost area of Northeast India with an average altitude of about 694m<sup>3</sup>. Although the state is quite remote, it holds the Imphal airport which is the second largest airport in North-East with direct connectivity with other metropolitan cities like Delhi, Kolkata, Guwahati and Agartala.

The bamboo resources of the Manipur constitute about 5.6% of the country's bamboo bearing area recorded in forest area<sup>2</sup>. The state has a huge pool of crafted people, including skilled and semi-skilled artisans. Cane and bamboo is one of the important sectors of the state and has been practiced for many generations. These cane and bamboo crafts have a huge variety in the state that range from traditional to modern creation. The most well known product in the state is bamboo basket which are created by the tribal people for their own use. Some of the other traditional products of cane and bamboo include *Lamgang* bamboo carrying basket, *Lengkot Sham* (conical basket), *Miruk* (measuring basket), *Shek* (filtering basket), *Rashakok* (container basket) and others.

### Cluster Groups

1. Noney
2. Muirei



## 7.3.1 Noney Cluster

### Cluster at a Glance

Location - Noney District

Cluster Partner - Rongmei Naga Baptist Association

Households<sup>1</sup> - 1000

Artisans<sup>1</sup> - 370

Trained Artisans<sup>1</sup> - 120



### About the Cluster Partner

The Rongmei Naga Baptist Association (RNBA) is a non-political, non-governmental organization. RNBA works in the areas of Natural resource management, Livelihoods, Education and land rights issues with the tribal communities in North East India. RNBA collaborates with other partner NGOs in the region for mainstreaming development in North Eastern states of India.

### About the Cluster

Noney Cluster is situated in districts of Noney, Tamenglong, Churachandpur and is located in remote hilly regions with limited connectivity to markets. The artisans in the clusters are scattered across the mountain range in the region and are largely engaged in cane and bamboo furniture. The cluster has also promoted a Gaithao Producer Company Limited of Artisans, leading people towards larger markets and producing skilful artisans



# Activities

## 8 Capacity Building Trainings and Workshops<sup>1</sup>

- 4 Product development trainings<sup>1</sup>
- 2 Industrial design trainings<sup>1</sup>
- 2 Entrepreneurship trainings<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are cane and bamboo furniture, flower baskets, trays, laundry baskets, and planters



# Glimpses of the cluster



Raw material procurement



Bamboo baskets and utensils



Cane furniture making



Bamboo treatment



Training of Bamboo utility products



Training of Bamboo furniture

## 7.3.2 Muirei Cluster

### Cluster at a Glance

Location - Muirei District

Cluster Partner - Mariam Mart Multipurpose Co-operative Society

Households<sup>1</sup> - 65

Artisans<sup>1</sup> - 65

Trained Artisans<sup>1</sup> - 65



### About the Cluster Partner

Mariam Mart Multipurpose Co-operative Society focuses on enhancing the livelihoods and providing employment to rural communities. The society helped further uplift the various artisans in the cluster by providing need based and market oriented training on bamboo and cane products

### About the Cluster

Muirei Cluster is situated in Ukhrul district of Manipur. The artisans of the cluster largely consists of unemployed women who are engaged in making furniture and baskets. The cluster has also constructed a high tech nursery from which they source the seedlings of bamboo plants



# Activities

## 4 Capacity Building Trainings and Workshops<sup>1</sup>

- 1 Product development trainings<sup>1</sup>
- 1 Design intervention training<sup>1</sup>
- 1 Exposure trips to showrooms, processing centres and retail outlets<sup>1</sup>
- 1 Entrepreneurship trainings<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are cane and bamboo furniture and baskets





# Glimpses of the cluster



Product Development Training



Bamboo plate



Products displayed in CFC

## 7.4 Mizoram

Mizoram also known as Lushai Hills District of Assam and is the land of rolling hills, valleys, rivers and lakes in Northeast India. The state is quite remote with an average altitude of about 526m, and limited logistical ease of transportation and access to economic markets of India<sup>3</sup>. Thus, export and import of products and raw material is a major challenge of the state.

Manipur holds about 3.05% of total bamboo bearing area under forests in the country. Bamboo and cane related crafts are a major source of income to the state of Mizoram<sup>2</sup>. A large number of craftsmen and skilled artisans in the state have been practicing and designing commercial bamboo crafts for generations. These communities are well known for their bamboo wicker hats and basketry. The women are experts in weaving while the men are experts in cane and bamboo work. In addition many of the houses in the state are also built with bamboo walls, floors and thatched roofs. Some of the traditional products of the state include *Paikawng* (open weave carrying basket), *Paiem* (closed weave basket), *Fawng* (small storage basket), *Thul* (storage container)

### Cluster Groups

1. Sesawng
2. Lengte



## 7.4.1 Sesawng Cluster

### Cluster at a Glance

Location - Aizawl District

Cluster Partner - Mizoram  
Bamboo Development  
Agency

Households<sup>1</sup> - 34

Artisans<sup>1</sup> - 34

Trained Artisans<sup>1</sup> - 34



### About the Cluster Partner

The mission of Mizoram Bamboo Development Agency (MBDA) is to develop bamboo-based industries in the state for the benefit, growth and development of the people on sustained basis. The major objective of MBDA is promotion of bamboo based industries, local traditional craft, research and marketing of bamboo products across the state.

### About the Cluster

Sesawng cluster is located in Aizawl district. The cluster is focused on product diversification apart from traditional cane and bamboo products like bamboo Momo steamers, stands trays and others, which they largely sell to local markets. The village headman is also one of the cluster artisans and is instrumental in passing on the traditional craft to the younger generation.



# Activities

## 4 Capacity Building Trainings and Workshops<sup>1</sup>

3 Product development / Industrial design trainings<sup>1</sup>

1 Awareness workshop on cane and bamboo<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are baskets and bamboo flowers



# Glimpses of the cluster



Products developed by the artisans



Cluster artisan during workshop



Bamboo Momo steamers



Bamboo pots



Cluster artisan during product development workshop



Cluster artisan during awareness program

## 7.4.2 Lengte Cluster

### Cluster at a Glance

Location - Aizawl District

Cluster Partner - Mizoram  
Bamboo Development  
Agency

Households<sup>1</sup> - 48

Artisans<sup>1</sup> - 48

Trained Artisans<sup>1</sup> - 48



### About the Cluster Partner

The mission of Mizoram Bamboo Development Agency (MBDA) is to develop bamboo-based industries in the state for the benefit, growth and development of the people on sustained basis. The major objective of MBDA is promotion of bamboo based industries, local traditional craft, research and marketing of bamboo products across the state.

### About the Cluster

Lengte Cluster is located in Aizawl district, the state headquarters. This is a newly established cluster which was formed only in 2022. Most of the artisans in the cluster are youth/college dropouts who were encouraged and mobilised to take up cane and bamboo craft to enhance their income and their livelihoods



# Activities

## 5 Capacity Building Trainings and Workshops<sup>1</sup>

2 Product development (decorative items and handicrafts) trainings<sup>1</sup>

1 Design Intervention training<sup>1</sup>

1 Awareness workshop on cane and bamboo<sup>1</sup>

1 Swachh Bharat Mission workshop<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are cane and bamboo baskets and furniture



## 7.5 Tripura

The state of Tripura is another vibrant state in Northeast India with an average altitude of 157m<sup>3</sup>. It is surrounded on all sides by Bangladesh which provides a huge potential for trade of various cane and bamboo products across borders. Tripura is also well connected to other states that have good markets like West Bengal, Kolkata and Assam through well established rail and roadways.

The bamboo bearing area in Tripura is about 2.81% of the country's bamboo bearing area in the forest cover<sup>2</sup>. Cane and bamboo craft occupy a distinctive part in the life of Tripura. The state currently produces a wide range of more than 200 exquisite bamboo and cane products with more than 10,000 skilled artisans engaged in the production of various handicrafts<sup>5</sup>. The government of Tripura has also taken keen interest in development of the industry both in domestic as well as international markets.

Some of the traditional cane and bamboo products produced in the state include *Jamatia* firewood basket, *Riang* carrying basket, *Laii* (small bamboo basket), *Turi* (semi spherical basket), cattle muzzles, *Mudah* (low stool), *Dulla* (fish basket), *Pathla* (rain shield), *Riang Hookah*

### Cluster Groups

#### 1. Teliamura





## 7.5.1 Teliamura Cluster

### Cluster at a Glance

Location - Khowai District

Cluster Partner - Ringma Society

Households<sup>1</sup> - 150

Artisans<sup>1</sup> - 150

Trained Artisans<sup>1</sup> - 25



### About the Cluster Partner

A non-profit organisation called the Ringma Society was founded in 2010. Its headquarters are in Agartala, Tripura. The Ringma Society primarily works in the areas of Governance, Employment, Human Rights, Housing, Health, Education, Water, Art & Culture, Agriculture, and Rural Development

### About the Cluster

Teliamura is located in Khowai district and was formed in 2019. Most of the artisans in the cluster belong to the Bengali and Manipuri community and are largely engaged in cane and bamboo furniture making. In recent times, the cluster has been engaged in manufacturing of the bamboo products through design technology and training interventions.



# Activities Cluster

## 4 Capacity Building Trainings and Workshops<sup>1</sup>

- 2 Product development/ industrial design trainings<sup>1</sup>
- 2 Entrepreneurship trainings<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are dustbins, decorative lamps, lamp shades, trays, murah, tea tables and sofa sets



# Glimpses of the cluster



Cane and bamboo murah



Cluster artisans



Cane and bamboo furniture



Bamboo furniture



Capacity building workshop



Participation in trade fair



## 7.6 Meghalaya

Meghalaya also known as the adobe of clouds, is a mountainous state, with stretches of valley and highland plateaus, and having an average altitude of 1055.5m<sup>3</sup>. Meghalaya is divided into three hilly regions namely Khasi hills, Jaintia hills and Garo hills. Khasi and Jaintia hills are well established and developed regions with good tourism and connectivity to local markets whereas Garo hills region is quite remote with limited establishment.

Cane and bamboo craft secure an important place in the economy of Meghalaya with abundant bamboo resources of about 5007 sq km of bamboo bearing area in forest cover<sup>2</sup>. Cane and bamboo craft has also occupied a solid position and has symbolic, religious, pictographic value in the state. These craft are segregated into two types:

1. Medium quality products which are suited to day-to-day purposes and local requirements
2. Higher quality products that are decorative and functional and are used to meet the requirements and preferences of more sophisticated markets.

Some of the traditional products of cane and bamboo in the state include *Khira* (Carry basket), pig basket, *Khasi shallow basket*, coiled cane containers, *Khasi storage basket*, *Khasi shallow basket* and others

### Cluster Groups

1. Nongpoh
2. Tura

## 7.6.1 Tura Cluster

### Cluster at a Glance

Location - West Garo Hills District

Cluster Partner - Meghalaya State Rural Livelihoods Society

Households<sup>1</sup> - 343

Artisans<sup>1</sup> - 60

Trained Artisans<sup>1</sup> - 60



### About the Cluster

The Tura Cluster covers the villages of Bansali, New Chandanpara, Tokonchi, Rongkhon, and Marenggre. The cluster has not received any intervention before and the people were very eager to participate in the programmes. People in this cluster have good traditional weaving knowledge and produces various forms of Kerang - carrying basket. Their products have high demand in the local markets and NECBDC through their training interventions was able to further enhance the quality and design of the products.

### About the Cluster Partner

The Government of Meghalaya established the Meghalaya State Rural Livelihoods Society (MSRLS). The primary goal of establishing this society is to establish a support structure from the state level down to the sub-district level that will focus on developing robust and sustainable community institutions for the disadvantaged. This will give a platform for the poor to engage in collective action based on self-help and mutual collaboration, as well as establish links with mainstream financial institutions and government departments to address the multifaceted facets of rural poverty.



# Activities

## 4 Capacity Building Trainings and Workshops<sup>1</sup>

- 1 Product development training<sup>1</sup>
- 1 Industrial design training<sup>1</sup>
- 2 Exposure trips to showrooms, processing centres and retail outlets<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are local murah, jewellery, earrings and baskets



# Glimpses of the cluster



Product development training



Design development training



Bamboo pre processing



Artisan receiving training certificate



Cane and bamboo construction



Product developed: basket

## 7.6.2 Nongpoh Cluster

### Cluster at a Glance

Location - Ri Bhoi District

Cluster Partner - Ri Bhoi Area Welfare Association

Households<sup>1</sup> - 4000

Artisans<sup>1</sup> - 200

Trained Artisans<sup>1</sup> - 150



### About the Cluster Partner

Ri Bhoi Area Welfare Association (RAWA) is a Registered Society, a Non-Governmental and a Non-Profit Making Voluntary Organization that works for the upliftment of the underprivileged people of Ri Bhoi District, including the poor, destitute, needy, and distress groups. RAWA's mission is to help the rural poor earn a better living. Its primary objectives are poverty alleviation, agricultural-based programmes, education, health, and sanitation. It also deals with topics such as unemployment, disaster management, and environmental concerns.

### About the Cluster

Nongpoh Cluster is located 52 km from Shillong which is state capital and also a major market for the products of the cluster<sup>4</sup>. The artisans in the clusters are mostly school dropouts who have been encouraged to take up cane and bamboo craft. The cluster's primary product is the bamboo charcoal and they also plan on developing a high tech nursery for self sustainability. The cluster also recently set up marketing shed in which they sell pickles to nearby villages





# Activities

## 9 Capacity Building Trainings and Workshops<sup>1</sup>

3 Product development (bamboo shoots, bag and charcoal) trainings<sup>1</sup>

1 Bamboo nursery raising workshop<sup>1</sup>

2 Exposure trips to showrooms, processing centres and retail outlets

2 Entrepreneurship trainings<sup>1</sup>

1 Awareness workshop on cane and bamboo<sup>1</sup>

## Products Designed

Some of the key products designed in the cluster are bamboo air purifier, buckets, table lamp, flower basket, trays, bamboo flowers, winnowing trays and bowls.



# Case Study: Bamboo charcoal

Bamboo charcoal is one of the innovative products made only in this particular cluster. It has high demand in the local market and is largely used for cooking and heating purposes.



Raw bamboo is first carbonised



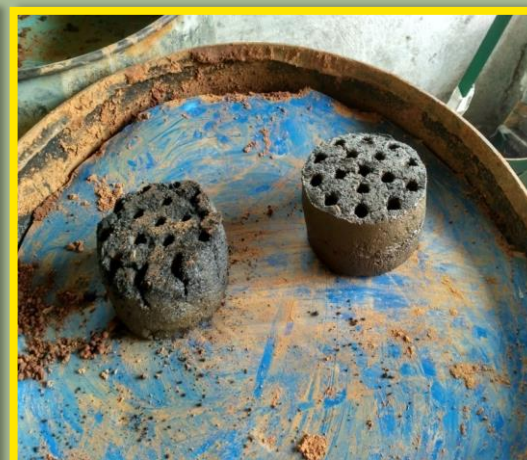
Carbonised is crushed into fine particles



The powder mixed with tar and made into paste



Bamboo charcoal moulded into shape



Bamboo charcoal sold at local market

# Glimpses of the cluster



Cluster artisans



Bamboo shoot



Bamboo Baskets



Bamboo charcoal making process



Charcoal making training



## 7.7 Sikkim

Sikkim is also known as the valley of rice and it has an average altitude of about 4133m<sup>3</sup>. It borders Tibet Autonomous Region of China in the north and northeast, Bhutan in the east, Province No. 1 of Nepal in the west, and West Bengal in the south. The state is 153 km from Siliguri which is one of the most vibrant business and market hub also for cane and bamboo products<sup>4</sup>.

The state holds about 0.66% of total bamboo bearing area under forests in the country<sup>2</sup>. The cane and bamboo craft exists in almost every village in the interior of Sikkim and the skilled artisans offer a distinguished range of products. Bamboo is also deeply embedded in several traditional of the state and remains an decades old integral craft in the state. Some of the traditional products of the state include *Lepcha hat*, *Murah* (small stool), *bamboo bell cover* and others

### Cluster Groups

1. West Bermiok
2. Sumbuk

## 7.7.1 West Bermiok Cluster

### Cluster at a Glance

Location - West Sikkim District

Cluster Partner - Himalayan Science Society

Households<sup>1</sup> - 250

Artisans<sup>1</sup> - 150

Trained Artisans<sup>1</sup> - 50



### About the Cluster

West Bermiok is located in West Sikkim district and is situated 115 KM away from Siliguri which is a popular tourist location and good market area for the products of the cluster<sup>4</sup>. This cluster is well established with many master trainers and executions. Many of the artisans in the cluster are elderly people who are encouraged and mobilised to take up cane and bamboo craft. The master trainers of the cluster have developed micro enterprises where they also train other people in their respective villages. The cluster partner has also supported the cluster in securing subsidies and loans from the National Bamboo Mission

### About the Cluster Partner

Himalayan Science Society is a Non-Governmental Organisation based in West Bermiok, Sikkim. The core objective of the organisation is to work with vulnerable sections of the community. They work mostly for sustainable livelihoods promotion, environmental conservation, ecotourism in the state of Sikkim. They have been working in the promotion of sustainable livelihoods cluster program since 2018.



# Activities

## 14 Capacity Building Trainings and Workshops<sup>1</sup>

- 3 Product development trainings<sup>1</sup>
- 1 Assembly line production concepts training<sup>1</sup>
- 2 Design intervention trainings<sup>1</sup>
- 1 Quality improvement training<sup>1</sup>
- 2 Exposure trips to showrooms and processing centres<sup>1</sup>
- 5 Entrepreneurship trainings<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are cane and bamboo coil, handicrafts, paper bins, trays, lamp sets, and wide variety of furniture



# Glimpses of the cluster



Tools at CFC



Cluster artisan working in CFC



Entrepreneurship Training



Micro cluster working shed



Eco-friendly file developed by cluster artisan



Products displayed at showroom

## 7.7.2 Sumbuk Cluster

### Cluster at a Glance

Location - South Sikkim District

Cluster Partner - Indreni Pariwar

Households<sup>1</sup> - 900

Artisans<sup>1</sup> - 100

Trained Artisans<sup>1</sup> - 30



### About the Cluster

Sumbuk is located in South Sikkim district and is 65 km away from Gangtok which has a huge market for cane and bamboo decorative and utility products<sup>4</sup>. This cluster has targeted unemployed women who have been encouraged and empowered to take up cane and bamboo craft as a sustainable source of income and livelihood.

### About the Cluster Partner

Indreni Pariwar was founded in 1983 as a non-governmental organisation. The organisation is based in Sikkim, India. Indreni Pariwar works in the areas of Art & Culture, Ecotourism, Environment and Natural Resource Management, Health & Nutrition, HIV/AIDS, among others. The core objective of the organization is to sustainable development in the State.





# Activities

## 4 Capacity Building Trainings and Workshops<sup>1</sup>

- 1 Product development training<sup>1</sup>
- 1 Production line concepts training<sup>1</sup>
- 2 Exposure trips to showrooms and processing centres<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are garden tables, arm chair, sofa, hanger, folding chair, den and lamps



## 7.8 Arunachal Pradesh

Arunachal Pradesh also known as the 'land of the rising sun' is the biggest state of Northeast India with an average altitude of 8120 m<sup>3</sup>. The state is quite remote and is located 601 km from Guwahati, Assam which is the gateway to Northeast India and has good established markets<sup>4</sup>.

The state holds about 10.53% of total bamboo bearing area under forests in the country and almost of all major tribes of the state have good indigenous knowledge about the use and management of the cane and bamboo resources<sup>2</sup>. The craft of cane and bamboo is an important craft in the state and the weave and design of these articles are distinctive in each region with specific customs and traditions varying across each tribe. The state is also known for its beautiful baskets and containers. Many tribesmen also make their own hats which are often decorated and worn with beaks and feathers of the birds. Some of the traditional cane and bamboo products of the state are *Awoo* (waistband), *Gallong* bamboo basket, *Tali* (flat haversack) and others.

### Cluster Groups

1. Dolungmukh
2. Daporijo



## 7.8.1 Dolungmukh Cluster

### Cluster at a Glance

Location - Kamle District

Cluster Partner - Arunachal  
Vikas Ebum Siksha  
Sangataan

Households<sup>1</sup> - 60

Artisans<sup>1</sup> - 60

Trained Artisans<sup>1</sup> - 60



### About the Cluster Partner

Arunachal Vikas Ebum Shiksha Sangataan (AVES) was formed by the group of the educated youth and the Senior Citizens including women of the Itanagar in the year 2001 at C-Sector, Near Forest Nursery, Naharlagun, Papum Pare District, Arunachal Pradesh. Arunachal Vikas Ebum Shiksha Sangataan (AVES) is registered under section 3 of society Societies Registration Act.1860. The key objectives of the Society are promoting farm and non-farm-based livelihood activities among the weaker section of society including unemployed.

### About the Cluster

Dolungmukh Cluster is located in the Kamle district and is located in the remote areas with poor connectivity to markets. The artisans of the cluster include mostly women and unemployed households who have been encouraged to take up cane and bamboo craft. The cluster is largely focussed on producing bamboo furniture and utility products



# Activities

## 9 Capacity Building Trainings and Workshops<sup>1</sup>

3 Product development/ industrial design trainings<sup>1</sup>

2 Farm level harvesting and processing trainings<sup>1</sup>

2 Exposure trips to showrooms and processing centres<sup>1</sup>

2 Entrepreneurship trainings<sup>1</sup>

## Products Designed

Some of the key products designed in the cluster are chair bottle, pen stand and folding table



# Glimpses of the cluster



Bamboo treatment



Artisan working in common facility centre



Common Facility Centre



Bamboo mug, glass and stands



Cane Shelf

## 7.8.2 Daporijo Cluster

### Cluster at a Glance

Location - Upper Subansiri District

Cluster Partner - Yamak Haji Welfare Society

Households<sup>1</sup> - 150

Artisans<sup>1</sup> - 60

Trained Artisans<sup>1</sup> - 60



### About the Cluster Partner

Yamak Haji Welfare Society was formed in 2018 in Upper Subansiri district of Arunachal Pradesh. This is a Non Governmental Organisation and its objective is to promote cane and bamboo based livelihoods, addressing environmental problems among others. To achieve its objectives, the organisation is providing vocational training to the unemployed youths, women and creating sustainable livelihood options.

### About the Cluster

Daporijo Cluster is located in the Upper Subansiri district and is located in the remote and hilly regions with poor connectivity to markets. The artisans of the cluster include mostly women and unemployed households who have been encouraged and mobilised to take up cane and bamboo craft to further enhance their livelihoods



# Activities

## 6 Capacity Building Trainings and Workshops<sup>1</sup>

- 1 Product development training<sup>1</sup>
- 1 Industrial design training<sup>1</sup>
- 1 Production concepts training<sup>1</sup>
- 1 Exposure trips to showrooms and processing centres<sup>1</sup>
- 2 Entrepreneurship trainings<sup>1</sup>



## Products Designed

Some of the key products designed in the cluster are cane and bamboo furniture and baskets



# Glimpses of the cluster



Awareness program



Bamboo furniture making



Bamboo treatment



Artisan working in common facility centre



Bamboo Chair



## 8. Project Milestones



### Collectivising and Mobilising the Artisan Groups

- Selection of artisans
- Formation of cab groups



### Infrastructure and Handholding Support

- Distribution of tools and machines
- Establishment of CFCs and marketing showrooms



### Building Skill and Capacity of Cane and Bamboo Artisans

- Number of trainings conducted



### Design and Sale of Products

- Design of products
- Participation of trade fairs

## 8.1 Collectivising and Mobilising the Artisan Groups



1992 Total Artisans Selected<sup>1</sup>

The artisans were selected from rural communities of Northeast Region providing them a sustainable source of income and enhancing their livelihood through cane and bamboo craft



31 Total Cab Groups<sup>1</sup>

The artisans were put into various CAB groups which helped to mobilise the community and allowed them to share the economical and social benefits of cane and bamboo craft enterprise

## 8.2 Infrastructure and Handholding Support

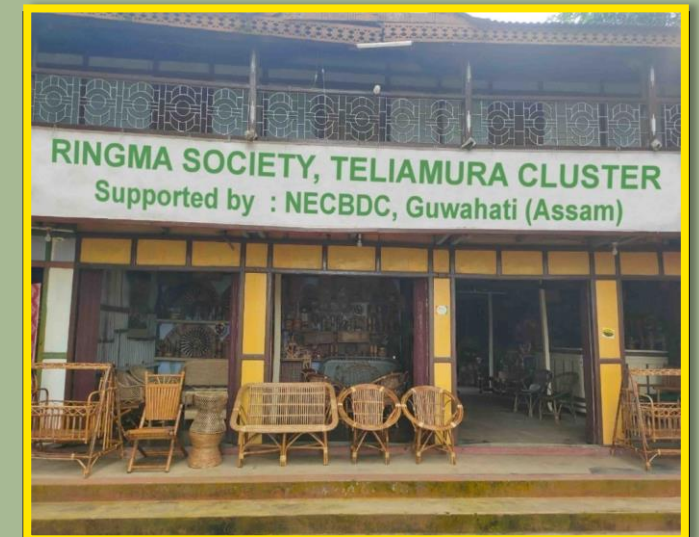


### 9 Tools/Machines Distributed to Each Cluster<sup>1</sup>

Uniform distribution of tools were provided to each of the clusters which helped increase the production capacity in short time frame

### 15 CFCs & 11 Marketing Showrooms Established<sup>1</sup>

CFCs and marketing showrooms were established in every cluster which helped in overall aggregation, value addition and marketability of the various cane and bamboo products designed



## 8.3 Building Skill and Capacity of Cane and Bamboo Artisans

107 Total Trainings Conducted<sup>1</sup>

A number of artisans were provided with need based capacity building workshops and trainings which helped the artisans develop various market driven product development skills



## 8.4 Design and Sale of Products



### 5-6 Categories of Products Designed<sup>1</sup>

Many varieties of cane and bamboo products were designed and developed throughout the course of the interventions including furniture, baskets, households utensils and others



### 15 Total Trade Fairs attended by the Clusters<sup>1</sup>

A number of artisans have attended trade fairs all around the country and generated a total volume of 5,54,000 sales across the clusters<sup>1</sup>

## 9. Success Stories



# 9.1 Gaithao Producer Company Ltd, Noney Cluster



Common facility centre (CFC), Noney



Products developed at CFC, Noney

## Before intervention

- Single source of income
- Limited knowledge on Cane and Bamboo products
- Absence of community institution



Training build the capacities of the artisans to produce market driven products



CFC helped the artisans to work with sophisticated tools and machineries

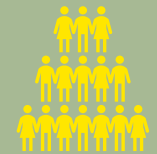


“The cluster program increased our awareness about the economic prospects of cane and bamboo and supported us in diversifying income opportunities. We were hardly using bamboo for producing any value added products before the intervention of the project”

## After intervention



Convergence with SFURTI scheme helped the producer company in building infrastructure, procuring high end machineries, exposure visits and others



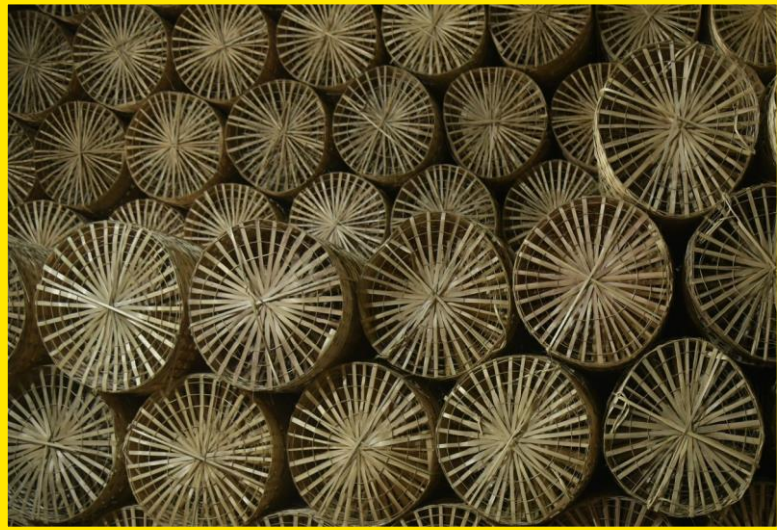
Producer company helped the artisans for aggregation and marketing of products. The monthly sales volume has increased to INR 40,000 thereby, increasing the average monthly income of the cluster members from INR 2000 to INR 5500

## 9.2 Power of collectivisation, Bezera Cluster



The Baredala Hasta Silpa Cooperative Society Ltd is a group of bamboo artisans of adjoining villages in Bezera, Kamrup, Assam. The artisans in this area were primarily engaged in making bamboo handicrafts and baskets used for transporting chickens which had a large demand. But there was no institutionalisation of their efforts due to which the artisans were unable to meet the demand. They also faced the challenges such as procurement of raw material, storage, transportation cost among others. Mr. Kanak Deka, Secretary, Baredala Hasta Silpa Cooperative Society Ltd. led the initiative of bringing the individual artisans under a single umbrella to address the challenges while meeting the existing demand.

The turnover for Baredala Hasta Silpa Cooperative Society Ltd for the year 2019-20 was INR 70,52,590. Through such collective approach the production capacity of the artisans has increased along with their working capital and lending power. The cooperative society produces and transports 2000-2500 number of chicken carrying baskets daily, catering to the markets of Assam. The society has also sent bamboo based sustainable dustbins to London, UK, which if approved would be supplied at regular intervals. This cooperative along with infrastructures created and training provided under NECBDC provided them the much-needed support to sustain the livelihood initiatives.



Kanak says, "The cooperative pulled the members together to reap the benefits of economies of scale and assured market "



Rubul a college student says, "I am able to work in my off time and able to fund my own studies."



## 9.3 Creating Last Mile Impact, West Bermiok Cluster



The West Bermiok cluster in Sikkim has taken an innovative approach to driving last mile impact among the rural artisans. Owing to the difficult terrain and remote location, very few schemes and benefits reaches the needy rural population. To address this gap the master artisans of the cluster have created four Micro-clusters in remote villages bringing in more artisans under the project's ambit. This initiative has helped the rural artisans in getting better access to state-of-the-art tools, modern designs, new weaving patterns and so on.

The micro clusters are led by master artisans: Shri Narad Mani Sharma, Shr Kul Bahadur Limboo, Shri Tek Nath Sharma and Smt. Pabitra Sharma. The master artisans have received subsidised loan of INR 9,00,000 from National Bamboo Mission. They have constructed small working sheds under the micro clusters where they train five to ten beneficiaries. This has helped in broadening the network of artisans and supporting the rural artisans to secure enhanced income.



Pabitra Sharma says "Pursuing my passion for making bamboo jewellery and with the vision of helping my fellow women artisans I have initiated the micro-cluster focusing on bamboo jewellery making

## 9.4 Unskilled labour to member of a Producer company, Noney Cluster





Duanreiliu Panmei hails from Longmai-2 village of Noney district, Manipur. She and her husband were working as unskilled labour. The income earned as unskilled labour was not sufficient to meet the ends of her family and education of their children. When the Noney cluster was formed, she became a member of the Gaithao Producer Company Ltd and also a member of a Self Help Group. She received training on bamboo shoot processing from the cluster and started her own production unit at home. She is now producing bamboo shoot and selling through the producer company and fetching good price for the produce . With the income she is able to afford school fees of children as well



Panmei says, “ I can now afford school fees and private tuition for my child and earning more compared to my previous work”



# 10. Sustainable Development Goals

 <p><b>1</b> NO POVERTY</p>	<ul style="list-style-type: none"><li>• <b>SDG 1 - No Poverty</b> : SDG 1 targets to end poverty in all its form everywhere by ensuring all men and women have equal rights to economic resources</li></ul>	<ul style="list-style-type: none"><li>• NECBDC carries out capacity building of the rural poor and linking them to gainful economic activities.</li><li>• Providing self-employment opportunities to the rural people</li></ul>
 <p><b>11</b> SUSTAINABLE CITIES AND COMMUNITIES</p>	<ul style="list-style-type: none"><li>• <b>SDG 11 - Sustainable cities and communities</b>: SDG 11 aims at making cities and human settlements inclusive, safe, resilient and sustainable</li></ul>	<ul style="list-style-type: none"><li>• NECBDC has undertaken cane and bamboo housing and constructions of different structures such as cafeterias, ecological homestays, waiting sheds and so on</li></ul>
 <p><b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<ul style="list-style-type: none"><li>• <b>SDG 12 - Responsible Consumption and Production</b>: SDG 12 aims at ensuring sustainable consumption and production patterns</li></ul>	<ul style="list-style-type: none"><li>• NECBDC has set up units to produce eco-friendly construction materials such as bamboo tiles, wall lining, box wagon floors, furniture among others</li><li>• Bamboo shoot is harvested for pickle making</li></ul>
 <p><b>15</b> LIFE ON LAND</p>	<ul style="list-style-type: none"><li>• <b>SDG 15 - Life on Land</b> : SDG 15 aims to protect, restore and promote sustainable use of terrestrial ecosystems, sustainable manage forests and halt biodiversity loss</li></ul>	<ul style="list-style-type: none"><li>• NECBDC supports and promotes large scale cane and bamboo cultivation in Northeast region which would help in ecosystem regeneration and soil restoration while preventing erosion</li></ul>

# 11 Bibliography

1. Data from analysis of responses for the SPOC questionnaire
2. India State of Forest Report 2021, accessed on 8<sup>th</sup> August 2020
3. en-us.topographic-map.com, accessed on 9<sup>th</sup> August 2020
4. Google maps, accessed on 8<sup>th</sup> August 2020
5. NECBDC Phase I Report

# Disclaimer

This Report ('Report') has been prepared by EY based on the discussions with various stakeholders, including the Northeast Cane and Bamboo Development Council officials, cluster implementation partners, artisans and others affiliated to the Cane and Bamboo cluster development project.

EY has not independently verified any of the information contained herein, and EY has not sought to establish the reliability of the sources of information by reference to independent evidence. The information provided does not purport to be all-inclusive or necessarily to contain all the information that any third party would need to take any sort of decision-making.

Neither EY, nor affiliated partnerships or bodies corporate, nor the directors, shareholders, managers, partners, employees, or agents of any of it, makes any representation or warranty, express or implied, as to the accuracy, reasonableness, or completeness of the information contained in this Report. All such parties and entities expressly disclaim any and all liability for or based on or relating to any such information contained in, or errors in or omissions from, this Report or based on or relating to the recipient's use of this Report.

This report is for information purposes only. While due care has been taken during the compilation of this report to ensure that the information is accurate to the best of EY's knowledge and belief, the content is not to be construed in any manner whatsoever as a substitute for professional advice.

EY neither recommends nor endorses any specific products or services that may have been mentioned in this report and nor do they assume any liability or responsibility for the outcome of decisions taken as a result of any reliance placed on this report.

EY shall not be liable for any direct or indirect damages that may arise due to any act or omission on the part of the user due to any reliance placed or guidance is taken from any portion of this report.

Neither EYGM Limited nor any other member of the global Ernst & Young organization can accept any responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this report. On any specific matter, reference should be made to the appropriate advisor.