Interactive Design Study
Cluster Level Report
DCS MSME Scheme
Band Five | 2011

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Design Clinic 5 Band Workshop Report: Poiranga Handloom Cluster, Boko | 2011 | Dibakar Choudhury
Poiranga of Boko in South Kamrup of the State of Assam is a typical example of a cluster of handloom industry in a specific geographic region where the dominant activity is that of *Eri* culture. The aim of DCS is to contribute to the overall performance and collective efficiency of clusters for development by assisting select local communities of individuals or groups and Associated institutions in the clusters. The advantage of adopting a cluster-based approach helps enterprises overcome disadvantages of economies of scale and weak capital base on one hand on the other hand, increases competitiveness by leveraging the advantages of flexible structure and faster decision-making process. At the cluster level it helps to respond well to the market challenges, facilitates quick dissemination of information, ensures sharing of best practices, and promotes skill development, technological innovations, offers better cost effectiveness due to distribution of many common costs and promotes wider public appropriation of benefits.
Design Clinic Scheme for Design Expertise to MSMEs, a unique and ambitious design intervention scheme for the country’s large micro, small and medium scale enterprises, is an initiative of Ministry of MSME, Government of India has been launched under National Manufacturing Competitiveness program. The scheme is being designed keeping in mind the objective of design awareness, design interventions and competitiveness improvement for largest group of industrial sectors, Micro, small and medium enterprises of the country which contributes to approximately 45% of total industrial production and 40% exports. They are major contributors to the GDP growth, accounting to about 8%. They

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They are also the largest employers after agriculture, employing an estimated 41 million people.

The main objective of the Design Clinic Scheme is to bring MS&ME sector and design expertise into a common platform and to provide expert advice and solutions on real time design problems, resulting in continuous improvement and value addition for existing products. This model brings design exposure to the door step of industry clusters for design awareness, improvement, evaluation, analysis and design related intervention. Design clinic scheme will assist industrial clusters to open a channel for design information inflow for creative, innovative and futuristic approach towards the product, process, operations, manufacturing and business design. The scheme will help generate insight for opportunity identification and design intervention for competitive and breakthrough solutions for
MINISTRY OF MSME

MSMEs.
The total scheme budget will be Rs. 73.58 crores, out of which Rs. 49.08 crores will be GoI assistance and the balance amount will be contributed by the beneficiary MSMEs. The scheme provides great opportunity to the large sector of MSME (Associations and Units) as well as Indian design fraternity – the design consulting firms, independent designers, various design institutes of the country and also the design students to engage them to assist the country’s large MSME sector move up the value chain through increasing the value and competitiveness of their products and services. The scheme targets to reach out to about 200
DCS MSME Scheme

MSME clusters over the next two and half years. This will be achieved through organization of about 200 design sensitization seminars, 200 Design Clinic Workshops and 400 design projects including 100 student design projects (final year thesis projects). National Institute of Design (NID), Ahmedabad will assist the Ministry of MSME, Government of India, as a nodal agency for implementing the scheme.

As part of the scheme a

- Design Clinic Centre and its regional centers are being set up in IIE campus
The approach of the Indian Institute of Entrepreneurship, Guwahati is to meet the demand for intervention through DCS under Ministry of MSME implemented by NID, Ahmedabad. Only if there is demand for certain service or product, will the beneficiaries be ready to not only pay for the services, but also make the best use of those. And no intervention can be sustainable unless all local industry have stakes in the process of cluster development for their own benefit.
The attempt of this **NAS** is to identify that unit of Poiranga in BOKO so that the purpose of the cluster level initiatives will be to build local industry (handloom) competitiveness, poverty alleviation, employment generation and also building local governance systems. The entry route of the Institutions will vary as per its mandate and competencies. These areas may be technology up-gradation, entrepreneurship building, skill development, livelihood promotion, quality up-gradation, market linkage facilitation, Design development etc.
The Poiranga handloom cluster is situated in South Kamrup in Boko areas. The location of South Kamrup is as follows: Nagaon district is on the east and southern part of Goalpara district on the West, the Bramhaputra river on the North and the hills of Meghalaya on the South.
As for the socio-cultural milieu, South Kamrup is divided into two regions by the city of Guwahati. It stands at a point and the two regions lying to the east and west of it are more or less separated in respect of socio-cultural relations. Though South Kamrup is inhabited by tribal and non-tribal population, it is primarily dominated by non-tribal. It is seen that the border areas are covered by the tribal population excluding riverside area of Bramhaputra. Among the tribal, the Rabhas are largest in number followed by the Bodos. There is a small number of Garo villages also. The important places of South Kamrup are as follows:
• **Palashbari:** The old Palashbari was practically eroded by the Bramhaputra and a new Palashbari has come up near the old one. Palashbari is a fast growing commercial place and is famous for exporting timber. The headquarters of the Palashbari Revenue Circle is located here. After the devastating erosion of Palashbari in 1956, the commercial centre of the town has been shifted to Bijoynagar. The official site has shifted to Mirza.
• **Chaygaon:** It is an important centre especially on jute and rice. Big weekly markets are held twice where considerable trade is carried out. Relics of the Chander Merghar constructed by Chand Sadagor of the Sati-Beula fame are still here. Chandrika Devalaya is an old place of worship in the locality. Local tradition links this temple with the Epic age. Ruins of a Shiva temple also exist here.
• **Boko:** Boko is also a trading centre of importance. It mainly has tribal population and the villages of this area are known for *Eri* culture.
Handloom is an ancient industry in India. The features of this sector vary across the country. In some parts of Kerala, Tamilnadu, Assam and Orissa, it has attained the status of a mature industry, and in other parts, it is still an enterprise confined to the needs of the household.
The last 100 years have seen the growth of mechanized textile production internationally. In part due to competition, handloom has lost much of its market and is almost non-existent in most countries. However, handlooms are still a force to reckon within India and some other Asian Countries such as Sri Lanka, Bangladesh, Thailand, and Cambodia.
Today, India’s textile sector comprises four important segments --- modern textile mill, independent power looms handlooms and garments. Though there is a huge, informal tailoring enterprise, it has not been studied or considered worthy of public attention, leave alone policy. There are also sub-sectors like textile machinery manufacturing and spinning sectors, which form the part of textile sector.

Though it employs the largest number of people, the handloom sector is considered a sunset industry, and there is an air of inevitability given the relentless march of mechanization, modernization and sophistication. Still, there are many advocates of handloom for reasons including ideology, philosophy, sheer love for handloom products and economic arguments. However, irrespective of the policies, projects and aspirations, arising out of various quarters, the handloom sector is undergoing changes that are impacting livelihoods of handloom weavers.
POIRANGA located in South Kamrup District of Assam State is such an area where handloom has been and dominant sector of means of livelihood. It is in this area that there can be found a particular concentration of *eri* and *cotton* handloom weaving and Located at a distance of about 90 kms from Guwahati city, there are numerous villages in and around the area where *eri* weaving is a dominant activity.
Historically it is seen that *eri* was reared for both food and yarn and can be traced back to a few hundred years. Since the area already had a history of *eri* rearing and weaving, these traders foreshow some prospect and thus entered the *eri* handloom weaving sector. The South Kamrup area of Assam was known to be a concentration of *eri* weaving, but this was done mostly self-consumption and also to cater the local markets in a limited way. This has now scaled down due to the cost factor and the *eri* handlooms of this area can now be said to be a product mainly for external market.

![Image of a person sitting in a small room with fabric on the floor.]
THE HANDLOOM SECTOR IN INDIA- A RETROSPECT

• India’s textile history dates back to past five thousand years. Its earliest evidence was found in excavation of Mohen-jo-daro and its proactive performance stretched even during India’s freedom struggle in the early part of 20th century. Art, fusion, and vitality, not only in the myriad fibers and blends but also in the plethora of weaves and the versatility of embellishment leaves everyone wonderstruck.

• The skill of hand-spun, hand-woven and handcrafted textiles crosses the realm of art and pervades the life of the craftsperson or the weaver by whom it is inextricably woven not only with its feelings and emotions but also as his only means of survival. Even in its phase of decline, the industry is estimated to provide employment to 6.5 million people in the country, second perhaps to agriculture.
The Past

During the pre-independence era, there was very little effort made to develop the handloom sector and handloom weavers were pitted against modern textile mills. They struggled to survive against competition from industrial products, exploitation by middlemen and the vicious circle of debt. The production was generally of poor quality because of inferior raw materials and badly organized marketing infrastructures.
• At the time of independence, there were about three million handlooms in the country. Due to poor market-knowledge, weak market linkages and inconsistency in the quality of products weavers were unable to get reasonable price for their products.

• In the 1960s massive state support started, production and technical improvements were encouraged, new markets were created, and road connections were improved.

• For more than 40 years now, the handloom sector has been receiving assistance through a wide variety of policy measures at the national, as well as State Government level.

• **Recent Trends**

• With the onset of economic liberalization in 1991 and consequent changes in policy, the weaving industry as a whole, now faces a severe crisis. Since 1998, subsidies have started to decrease and by the end of the year 2000, purchases by Government corporations have also fallen. Further, although any assistance given to this industry in the past should have directly benefited the weaving community, which is the most underprivileged class, yet the bulk of weavers remain impoverished. They may have received a larger number of orders but their wage rates have not increased since years.
The Future

The Indian hand-woven textiles demonstrate sheer synergy of craftsmanship and tradition, the world’s largest pool of highly skilled textile workers, the added advantage of small runs, the ideal source of inspiration for the couture fabrics and the readiness to design, sample and weave with international designers. The Indian handloom industry is largely dispersed and each pocket has developed as a specialized cluster with a certain distinction of its own. Whereas some of them have been able to sustain themselves the others require specific and
• strategic interventions to enable the weavers harness their own skill and become self-sustainable.

CORE CLUSTER ACTORS

• In any handloom cluster, the Core Cluster Actors consists of Traders, Master Weavers, Weavers, Designers, Dyers and Yarn suppliers. Out of these, in the Poiranga the majority are the Weavers.
• The Traders

The traders have been the mainstay of marketing of handloom products. They are mainly Marwaris although now many Assamese businessmen have also entered the eri market. The traders are presently an affluent class with other means of income as well. Some of the big ones also own a large number of looms themselves. They have good marketing contacts, a fairly good sense of design innovation and a self-built capital base. They have directed part of their capital into up gradation of looms and design, and partly in sectors other than weaving. The traders however seem to be oblivious to the hardships of the weavers and are largely concerned with their own survival and growth. They also remain secretive about their trading activities. Nevertheless, this group of core actors can prove to be instrumental in bringing about capacity building of the Weavers provided their outlook is made more holistic. For instance, they do not acknowledge the contribution of weaver’s family, particularly the women weavers who not only weave but also perform reeling, spinning and sometimes even rearing activities. This attitude needs to be changed.
The Master wavers

Decades back, this category was itself engaged in the weaving occupation but today they are mainly traders who undertake the overall responsibility of taking orders and getting them executed. They own looms and get weaving done on contractual basis. Usually, directly or indirectly, they control anything from 5-10 looms to about 30-40 looms. They supply weaver with raw material, which is woven according to the specification of the Master Weavers. They pay for the charges incurred by the weaver for weaving.
The Weaver

The Poiranga area has a cross section of weavers from different communities and castes. There is also a fair distribution between tribal and non-tribal weavers. In fact handloom weaving is more or less a household activity. Out of the entire weaving population only a very small percentage of them have been able to provide a good living standard to their families, i.e. providing education or necessary consumables. Only some families have been able to undertake loom up gradation.
• **Contribution of Women Weavers:**

Women are engaged in the weaving industry in a major way even though their contribution is either unpaid or poorly paid for the ancillary activities if performed by her outside family weaving. It is estimated that about 99% of the weavers are women.

- Women are mainly confined to the house, although there are some examples of women going for cultivation work.
● Boys and girls are given an opportunity to attend school, but only in the self-sufficient homes. Many of the average earning weaver families were found to be educating their younger generation before training them on the loom.  
● The younger generation (age group 15-18 years) was found to be averagely educated, enlightened, keen learners and above all ready to adopt weaving as their profession provided they had reasonable returns.  
● Absence of social security particularly amongst the average and poor weavers makes them indebted to the upper income groups such as the Master weavers and the Traders.
• The self-sufficient weaver spends on daily necessities, schooling and if savings permit on durables such as music systems, television sets, etc.

• Up gradation in looms and trade is noticeable amongst the high income trading and weaving families.

• The economic condition of weavers is not good, that is in terms of their looms, necessities of daily living,

• The economic condition of the other weavers is close to subsistence with family earnings falling in the range of Rs. 50-Rs. 60 per day.

• The looms are the traditional hand looms situated in dimly lighted sheds where sometimes the whole family lives, cooks, eats, weaves and sleeps.
The Eri Production Process

• Basic information of eri
Life cycle of silk worms has four stages- egg, larva, pupa, and moth. Domesticated *eri* silkworms are multivoltine which completes 5-6 generation per year.
• **Stages of eri silkworm:**

<table>
<thead>
<tr>
<th>Different Stages of <em>eri</em> silk worm</th>
<th>Summer (minimum days)</th>
<th>Winter (maximum days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egg stage</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Larval stage</td>
<td>17</td>
<td>45</td>
</tr>
<tr>
<td>Spinning stage</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Pupal stage</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>Moth stage</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Total days</td>
<td>46</td>
<td>97</td>
</tr>
</tbody>
</table>
Rearing schedule for *eri* silkworm:
### Spring season:

<table>
<thead>
<tr>
<th>Name of Crop</th>
<th>Date of hatching/brushing</th>
<th>Date of maturing</th>
<th>Date of moth emergence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1\textsuperscript{st} batch</td>
<td>March 16 to 18</td>
<td>April 8 to 10</td>
<td>April 21 to 23</td>
</tr>
<tr>
<td>2\textsuperscript{nd} batch</td>
<td>May 4 to 6</td>
<td>May 22 to 24</td>
<td>June 5 to 7</td>
</tr>
<tr>
<td>3\textsuperscript{rd} batch</td>
<td>June 16 to 18</td>
<td>July 4 to 6</td>
<td>July 17 to 19</td>
</tr>
<tr>
<td>4\textsuperscript{th} batch</td>
<td>July 28 to 30</td>
<td>August 16 to 20</td>
<td>August 31 to September 5</td>
</tr>
</tbody>
</table>
• Autumn season:

<table>
<thead>
<tr>
<th>Batch</th>
<th>5th batch</th>
<th>6th batch</th>
<th>November 3 to 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>September 14 to 17</td>
<td>October 16 to 19</td>
<td>November 15 to 17</td>
</tr>
<tr>
<td>Basic seed rearing at government grainage</td>
<td>January 27 to 28</td>
<td>February 19 to 21</td>
<td>March 6 to 8</td>
</tr>
</tbody>
</table>

Post Cocoon Operation:

In the post-cocoon operation we have to sun dry and go for degumming of the cocoons:
• The key goal of cocoon drying is to protect cocoon quality, preserve condition of cocoons for reeling and prevent damage caused by long periods of storage. The first hazard is the continued metamorphosis of the pupa. A newly emergent moth will pierce the shell rendering the cocoon useless for conversion to raw silk. Exposure to excessive moisture within the cocoon causes putrification and moulds.

• **Sun Drying:**
  • No investment required to dry cocoons in bright sunshine. Clearly, this is only possible in tropical and sub-tropical zones. Fresh cocoons are spread in thin layers on a mat or planks of wood and exposed to direct sunlight. Depending on the strength of the sun, the process takes two or three days. Though chip and simple to employ, the main disadvantage is silk fiber’s sensitivity to ultra-violet rays, with harm fiber strength and color. Since there are limited facilities for quick marketing of cocoons, sun drying continues to be utilized in many tropical and sub-tropical countries.
De-gumming of *eri* cocoons:

Cocoon cooking unwinds the cocoon filament spun by the silkworm. The sericin covering around the cocoon filament is agglutinated after silkworm spinning, and then hardened through the cocoon drying process. In preparation for reeling, it should be softened.

- Processing softens sericin by heat, water and steam. Ideally there will be uniform softening of the outer and inner cocoon shell.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Recipe-I</th>
<th>Recipe-II</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Eri</em> cocoon</td>
<td>1kg</td>
<td>100 gms</td>
</tr>
<tr>
<td>Soda</td>
<td>10% (100 gms)</td>
<td>2 gm/ltr</td>
</tr>
<tr>
<td>Soap</td>
<td>1:10</td>
<td>1:10</td>
</tr>
<tr>
<td>Material: Liquor</td>
<td>1:10</td>
<td>1:10</td>
</tr>
<tr>
<td>Boiling time</td>
<td>1 hr</td>
<td>1 hr</td>
</tr>
<tr>
<td>Temperature</td>
<td>90-95 degree Celcius</td>
<td>90-95 degree Celcius</td>
</tr>
</tbody>
</table>
● Take water in a stainless still container and put over fire. When the temperature rises to 50-60 degrees Celcius add soda or soda soap (as per requirement) and stir well to dissolve it.
  ● Immerse the cocoons tied in a thin muslin cloth and boil for 45-60 mins at 90-95 degrees Celcius.
  ● Wash the properly boiled cocoons in clear water and clean the inner dirt of the cocoons (if any) and dry
  ● Make eri cakes putting 5-6 cocoons together.
  ● Use the cakes for spinning.

**Sun drying of eri cocoons:**
  ● Remove the pupae from the eri cocoons through the open end just after harvesting, if the cocoons are not preserved for breeding purposes.
  ● Spread the empty cocoons in bamboo/wooden tray or on a tarpaulin in a thin layer and expose to sun for 2 to 3 days.
  ● Follow the same procedure for eri cut cocoons also.
  ● These cocoons can be preserved for many years.
  ● If the cocoons are spun just after harvesting then shifting is not necessary.
  ● Other methods of shifting is not required for eri cocoons.
Eri is not a continuous filament and so it does not require reeling or unwinding of cocoons. So, eri cocoons are spun straight on a `takli` or small machine or in a spinning mill. All cocoons except the stained ones are considered good for spinning.

**Spinning:**
Silk reeling is the process by which a number of cocoon baves are reeled together to produce single thread. This is achieved by unwinding filaments collectively from a group of cooked cocoons at one end in a warm water bath and winding the resultant thread onto a fast moving reel. Raw silk reeling may be classified by direct reeling method on a standard sized reel, indirect method of reeling on small reels and the transfer or reeled silk from small reels onto standard sized reels on a re-reeling machine. The last technique is primarily applied in modern silk reeling processes.

**Various reeling devices:**

**Hand spinning wheel (`Takli`)**
This primitive spinning apparatus is operated by two hands – one to drive the wheel and the other to feed in cocoons. One end of the reeling thread is wound onto each wheel, while cocoons are boiled in separate pot.
**Charka type spinning machine**

The charka type is in use in India. This machine is operated with separate work motions in reel driving and cocoon feeding to reeling ends by two men per machine. Each machine has 3 ends or more to a reel, which is the same size as the large wheel of the Re-reeling machine in order to save the re-reeling process (direct reeling method).

**Sitting type spinning machine**

There are two kinds of sitting type reeling machines, foot operated and motor-driven. The motor driven reeling machine is not equipped with the stop motion attachment. There are obstacles to the production of good quality raw silk as the raw silk thread is wound too rapidly to maintain good quality control.

The traditional `takli` produces 5 gms of yarn per hour. The other machines produce yarn at five times higher rate. There are weavers who can spin 10 or even 15 gms per hour on a `takli`. 
As a whole spinning remains an area of concern because of two reasons:

Firstly, the yarn quality is affected. This is because of the fact that in a household different women folk spin on the `takli` thereby resulting in a difference in quality of the yarn. Also since a poor weaver family purchases cocoons in small quantities the yarn required to make, say, a men's' shawl comprises of different yarns and hence the quality is not consistent.

Secondly, the `takli` spinning slows down the production process. This is because on a `takli` the amount of days required to make yarn for a pair of shawl is about 15 days (daily output of 60 gems of yarn if `takli` is run for 3 hours). But the demand for shawls is seasonal; October-February is the peak season for weaving.

When a weaver does not have enough weaving work she engages herself in the less rewarding `takli` spinning.

Social dimension of `takli` spinning:
Spinning on a `takli` is like second nature to the weaving families. While a weaver spins on a `takli` she at the same time chats thus rendering the fatigue content of the work low.
• Spinning on a `takli` also brings supplementary income to a poor weaver family which other technologies cannot deliver.

• Weaving:
The weaving is generally done on traditional looms. There are `taat` looms and `haath` looms but `taat` looms are mainly vogue. The `haath` looms are used for weaving wide width fabric.

- **Basic information on eri (standard):**
- **Eri**

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Particulars</th>
<th>Eri</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scientific name</td>
<td>Philosamia ricini</td>
</tr>
<tr>
<td>2</td>
<td>Major food plants</td>
<td>Castor, Kesseru</td>
</tr>
<tr>
<td>3</td>
<td>Spacing of plantation</td>
<td>Castor- 1.5 by 1.5 m Kesseru- 2 by 2</td>
</tr>
<tr>
<td>4</td>
<td>Number of food plants per acre</td>
<td>Castor- 1711; Kesseru- 1200</td>
</tr>
<tr>
<td>5</td>
<td>Season for raising nursery</td>
<td>Kesseru- February to March</td>
</tr>
<tr>
<td></td>
<td><strong>Season for raising plantation</strong></td>
<td><strong>Castor- March - April</strong>&lt;br&gt;<strong>Kesseru- August – September</strong></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Yield of lives per acre</td>
<td>Castor- 10000 Kgs&lt;br&gt;Kesseru- 36,000 Kgs after 5th year of Plantation</td>
</tr>
<tr>
<td>8</td>
<td>Number of eggs per laying</td>
<td>200 - 350</td>
</tr>
<tr>
<td>9</td>
<td>Quantity of leaves required to rear 1 DFL</td>
<td>Castor- 10 Kgs.&lt;br&gt;Kesseru- 8 Kgs.</td>
</tr>
<tr>
<td>10</td>
<td>Cocoons from 1 DFL</td>
<td>200-250</td>
</tr>
<tr>
<td>11</td>
<td>Number of cocoon to a kg</td>
<td>With pupa – 250&lt;br&gt;Empty – 2500</td>
</tr>
<tr>
<td>12</td>
<td>Average quantity of cocoon per 100 DFL</td>
<td>20,000 -25000 numbers with pupa&lt;br&gt;80 -100 kgs Empty cocoon 8-10 kgs</td>
</tr>
<tr>
<td>13</td>
<td>Quantity of cocoons required to produce 1 Kg of yarn</td>
<td>1.3 Kgs</td>
</tr>
<tr>
<td>14</td>
<td>Denier of single cocoon filament</td>
<td>Spun silk (count)</td>
</tr>
<tr>
<td>15</td>
<td>Average filament length of a cocoon</td>
<td>15 mtrs</td>
</tr>
<tr>
<td>16</td>
<td>Ratio for silk worm seed production</td>
<td>1 DFL per 5 seed cocoons</td>
</tr>
</tbody>
</table>
PRODUCTION PROCESS OF ERI SHAWLS AND FABRIC

• Each stage of the production process has been briefly explained below:
1. Procurement of raw material: The raw material or **eri** cocoons are purchased by the Spinners from either the castor farms or local sellers who come to sell from the adjoining **eri** rearing villages at the weekly markets. The Weavers also sometimes purchase readymade **eri** yarn from the yarn dealers at Bijoynagar or Chaigoan or other such places.
2. The dying of **eri** yarn is generally not done although at present some of the Weavers are going for dyeing locally by using Vegetable dye material and on an experimental basis.
3. The cocoons are boiled by the Spinners (de-gumming) and make them into **eri** cakes which are used for spinning. The spun yarn is then made into hanks.
4. After this the yarn is loosened and wound on reels. This is a prelude to the preparation of the wrap and weft.
5. For the weft the yarn is wound on pirn with the help of a Charkha and this activity is usually performed by the members of the weavers’ family. Although wrapping is a specialized, it is generally performed by the Weavers only. The wrap yarns are wound on bobbins, which are arranged across a wooden frame called reel. The yarns from these reels pass through a reed to be wound around a vertical drum.
6. The next step is the task of passing the wrap through the reed and the healds. The wrap threads are then joined to the old wrap threads with a deft twist of the hand of the women folk. This process takes approx 3-4 days.

7. Before the actual weaving begins the Weaver sets the design of the border of the shawl along with the motifs. If the loom is fitted with a Jacquard machine the design motifs are woven with the help of the designed punch cards that are fitted with the vertical harness. In other cases the motifs are woven with the help of design shuttles. Thus the process of making designs on ordinary looms is a time consuming one and it requires a lot of attention of the womenfolk of the weaving family. This process takes anywhere between 3-4 days depending on the complexity of the design and the type of loom. The amount of time taken reduces if the number of ply in the weft yarn is more and consequently the weaver can move faster and cover more ground. However in this case the output is less fine. Similarly higher the reed count more is the production time but the finer is the shawl.

8. The weaving is performed by one or two very skilled weavers of the same family. The looms being used are largely traditional handlooms with shuttle. The `eri` shawl or fabric or which is called `thaan` in local parlance does not generally require any post loom process except calendaring for smoothening out the fabric after it is cut off the loom to be packed and sold. Little is done by way of labeling and product specification or by way of customized packing methods.
**Eri culture:** The silk produced by *Philosamia ricini* is called *eri* silk. It is one of the non-mulberry silks and is grown in Assam in the eastern parts of India. The heavy rainfall & humid atmosphere in these parts are suited to *eri* culture. The food plants for *Philosamia ricini* is castor. The alternative food plants are Plumeria Ailanthus papaya, Carica utilissima, Manihot fragans but *eri* culture is mainly practiced on castor. This silk worm is multivoltine & is reared indoors. The eggs are white, hatch in ten days. The hatched larvae are mounted on castor leaves in the rearing-house & are allowed to grow by periodical feeding. The worms pass four moults during its larval period of 30-32 days. *Eri* silkworm is generally hardy and not easily susceptible to diseases. At the end of the larval period, the larvae crawl in search of a suitable place among castor leaves to spin the cocoons. The cocoons are usually white. However, brick red cocoons have also been observed. The cocoons of *eri* silkworm cannot be reeled, as they are made up of uneven fibers. Usually, after the emergence of the moths, the cocoons are used for producing spun-yarn. Since the pupa in this case has a chance to escape, *eri* silk in a sense is eco-friendly or a non-violent product.
Raw Materials and Market:
Raw Material:

The basic raw material is the *eri* cocoon. Other than South Kamrup district, the other *eri* cocoon producing districts are that of Dhubri, Barpeta, Darrang, Kokrajhar. These districts together contribute about 20 per cent of the *eri* production of the State of Assam.

The silk which is derived from *eri* cocoons is a protein fiber produced by the worm for spinning the cocoon. The purpose of the cocoon is to provide protective casing to the worm during the most critical period of its life, i.e., the pupae stage. Basically there are two proteins that form the silk fiber, i.e., `fibroin` which constitutes the core of the fibre and `sericin` a waxy substance which encases the fibroin. These proteins are synthesized by the silk worm from the leaf it feeds on during its larval period. The details of *eri* cocoon are furnished below:

- **Color:** White, Brick Red (unreelable)
- **Shape:** Elongated flossy spindle shaped.
- **Weight of single cocoon**
  - With pupae: 3.5 to 4.7 gms
Nos./kg of cocoons required
to produce 1 kg silk yarn 1.3 kgs
Single cocoon filament length 15 mtrs.

The *eri* cocoons are readily available in the Boko area but the bulk of the cocoon goes to Bhagalpur/Bihar for mixing with *tassar*. The price of the *eri* cocoons is increasing yearly which in turn is hurting the *eri* weaving in a large way. It is largely the poor families that are engaged in rearing. Some traders provide money to these rearers as advance and obtain cocoons from them but at a price not justified as per the labor put in by the rearers. *Eri* cocoons are also sourced from the rearers by agents/collectors. This kind of sourcing is not a primary activity but the traders enter the *eri* sector depending on the market condition and other considerations.

*Eri* silk worm rearing is an arduous process and has not grown over the years. A lot of timely care is required and cannot be pursued as one of the multiple occupations. Even then the poor pursue the activity as a tradition. The main constraint to growth of *eri* is availability of food supplement – castor for the larvae. The production of *eri* will rise only if there is a technical
breakthrough in terms of requirement of castor. Land is another factor. The poor do not have enough land to raise *eri* farms for cultivation. The quality of seed is another important factor. Good quality seed will give a good harvest of large cocoons and in turn better quality of the *eri* yarn. In the Poiranga cluster the rearing is done by tribal as well as non tribal families in relatively remote areas because the worms are sensitive to noise.

**Storage, Handling And Seasonal Mismatch:**
If one were to go by history, *eri* silkworms were raised traditionally for food supplement. In local parlance the pupae is called `polu`. Because of these preservations of cocoons is not so proper which in turn leads to considerable wastage.

During the period April to August 2/3rd of cocoon production is achieved. The balance is completed during the November to January period. April to August is a relatively lean season for weaving purposes. It is also seen that old cocoons give less yield than the fresh ones. Thus there should be better methods of storage and preservation of cocoons as because there is a miss-match between the weaving and rearing season.
Market:

The factors controlling the *eri* market takes into consideration of the following basic ingredients of *eri* silk:

That it is a winter product.

It is a traditional and ethnic product which is extremely durable and expected to outlive the buyer and handed down from generation to generation.

It is an eco-friendly product and is non-violent in nature.

*Eri* is also an expensive product. A typical *eri* women’s shawl can cost anything between Rs. 600 to Rs. 750 and men's’ shawl between Rs. 1000 to Rs. 1400. The *eri* fabric or ‘*thaan*’ is sold in running metre at the rate of Rs.280 and above depending on the quality of the fabric. However even if *eri* is an expensive product its rank is not as coveted as, say ‘*pashmina*’ shawls. In places like Buddhist regions of Nepal, Bhutan, etc., *eri* is a coveted product and even the middle class buys it. The product line of *eri* is also narrow compared to other fabrics. Bulk of it is men’s shawl.
Market size and destination:
Men’s shawl (2.5 m by 1.25 m) : 1200-1800
Women’s shawl (2.25 m) : 750-1000
Fabric (‘thaan’ is 12 m by 36 inches) : 220/Mt

The *eri* products that come out of the Boko area are relatively simple with no intricate designs or dyes. These plain products generally go the Buddhist areas,
mainly Nepal from where it is marketed in a large way. The Nepal market for eri men’s shawl is large and occupies a big chunk of the international market. Generally, the Buddhists use the eri shawls as a wrap or even sometimes as a lining material. It has been reported that some eri products are dyed outside India. China is also a major purchaser of eri products and has also entered the market in a large way. The rest of the market of the eri men’s shawl is in northern and northeastern India. The women’s shawls sell largely in Assam and other northeastern states of India. Compared to the men’s shawls, women’s shawls are designed and also involves mix of other fibers for better effect. The eri `thaans` generally go to places like Rajasthan, Bihar and Uttar Pradesh where they are used for men’s winter wear ‘Kurtas’. Bed spreads, quilts and other furnishings made out of eri products is mainly exported and not much is known about the final use and value addition of these products in the international markets.

**Process of Sale:**

The weavers generally sell their products to the local traders. The local traders in turn sell it to the traders from outside the state like Nepal/Bihar, etc. there are also some businessmen of Bijoynagar area who have established direct contacts with buyers from different parts of the country or even outside the country.
• These businessmen sell large orders of *eri* products outside through the channels.
• Some weavers directly sell the *eri* products at different exhibitions, fairs, either through government agencies or NGOs, etc. Otherwise the women weavers sell the *eri* products mainly in local markets but this is done in only a small way.

• Many middlemen have also infested the *eri* market at Boko and operate when there is a storage. Thus the chain is generally like this:

• Woman Weaver-Local Trader- Trader from outside the State:

The local traders of Boko do not have a clear grasp of the end use of the *eri* products when it goes outside the State. Things like product price, specifications do not fall in a clear understanding between the local trader and the outside trader. Customer profiles, trade margins, etc., are areas that remain in the dark for the local trader. The entire *eri* trade can be said to be a sort of wholesale trade and is carried out as per orders from buyers.

• **Market shifts:**

• During the last few years there have been no radical changes in the market so as to throw the business out of gear. At times there are temporary hitches but they are soon overcome.
• However the weaver force is not showing any significant growth.

• Competition and External Interest:
  • The *eri* market has not been able to make in depths nationally because of the lack of awareness of *eri*. The Poiranga area also does not seem to face much competition from any other *eri* cluster in the country.
If there are any significant competitors then they are Karnataka and China. Karnataka has been reported to open up many product development opportunities for eri ties, bed spreads, curtains, stoles, ‘kurtas’ and even jeans. As of now however there is not much evidence of active interest in eri products by designers, non-local exporters or foreign buyers.

• **VALUE CHAIN ANALYSIS**

• For the production process and the marketing channels discussed in the previous chapters, a value chain analysis table and a chart has been presented which enables a tabulation of the contribution of the various cluster actors as well as helps to ascertain the value addition outside the cluster.

• For a typical pair of eri men’s shawl we have the following:
Cocoon Rearer (1125 gms)  Rs.400
Cocoon Trader Margin  Rs.100
Cocoon Cost to Weaver  Rs.500
Cocoon spinning into yarn (cooking included)  Rs.400
Shawl Weaving  Rs. 750
Weaver level Cost  Rs.1650
Local Trader margin (40% to 60%)  Rs.2475
Outstation Trader Margin  Not known.

From the above it is seen that the local trader-cocoon and eri trader have a 37% share in the value chain. The chain does not show yarn trader since he is not ubiquitous. If we introduce the yarn trader, the trader share will move up to 40%.

The trader margin up to the yarn level is reasonable because the system operates in an environment where players have access to one another and there is active knowledge. A woman may buy cocoon from a trader, spin and sell the yarn back to the cocoon trader or buy ready yarn from him. The woman is clearly aware of the gross margins.
It is in relation to the external buyers- from Nepal/Bihar, that the margins rise sharply because the weavers do not have knowledge about or access to these buyers. The limited volumes sustain the system.

The process equilibrium also sustains the chain. A determined woman weaver can earn, say, Rs.1500 per month and this meets her expectations. A trader who accomplishes a turnover of Rs.1 crore, after considering his operating expenses, etc., earns about Rs.15 to Rs. 18 lakhs per year. His investment in working capital will vary from Rs.60 lakhs to Rs.80 lakhs and that is his key strength.

The enhanced expectations of weaver women and investment preparedness by women weavers will alter the shape of the value chain.

**Lack of Integration:**

While cocoons are not a constraint there is a perception that rearing and weaving are getting divorced. Those families that rear do not weave and vice versa.
# Issues of the different economic segments in the cluster:

<table>
<thead>
<tr>
<th>SL No</th>
<th>Segment</th>
<th>Major Issues</th>
<th>Remarks</th>
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</table>
| 1     | Weaves earning less than Rs.2500 p.m | - Working capital  
- Health  
- Mainly unskilled  
- Poor marketing linkages; mostly doing distress sales, either to Master Weavers or to near Master Weavers or to nearby villages.  
- Mainly produce low range | Existing interventions are of generic nature. They need focused attention on working capital solution and skill based capacity building social measures. |
<p>| 2     | Weavers earning between Rs.2500 p.m to Rs.5000 p.m | Heavy dependence on local traders for the sale of their products and raw material supply. Occasionally participate in expos organized in different parts of the state or outside the state. Mainly produce middle range | Need selected market interventions through network mode. Most of these are members of cooperative societies. However, the Presidents and Secretaries of the societies have monopolized these societies to market their products. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Master Weavers earning between Rs.5000 p.m to Rs.10,000 p.m</th>
<th>Mainly linked to Government agencies for the marketing of their products.</th>
<th>Need better marketing linkages with high-end retailers like Fab India. Participation in International fairs through Government agencies. Need designer inputs on regular basis</th>
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<td>3</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>Traders</td>
<td>Currently, controlling 90% of the cluster’s output. They are mainly procuring from the first three categories. Currently, supplying to the major outlet in different metros through agents</td>
<td>Mainly require buyer-seller meets at South Kamrup and other important cities in India. - Inputs required for diversification of the products especially in garments and furnishings.</td>
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VISION FOR THE CLUSTER

This could be achieved by the following strategic interventions in the cluster:

THE VISION STATEMENT:

This could be achieved by the following strategic interventions in the cluster:
Branding and effective use of Geographical Indication provisions.
Better technology usage in the pre-loom and post loom activities, including dyeing and printing.
Better infrastructure.
Effective marketing linkages.
Empowerment of private sector.
Revitalization of Government Training Centre into high grade technical Resource Centre.

The Strategy:
The above-mentioned issues are not new, and known to cluster actors for long. In the past also there have been a number of attempts to provide solutions for the typical problems.
The following strategy would be adopted: As the cluster is dynamic with increasing turnover and capacity of looms over the last decade, the primary thrust would be to enhance its competitiveness by bringing synergy between the different segments and players in the cluster. The cluster will be viewed as an organic whole with diverse groups, each of which needs to be strengthened in coordination with the other.

- The private sector would be empowered to steer its own route through the development of Local Institutions, Networks, Consortia, and Self-Help-Groups.
- Quality awareness and related training in the areas of upgradation of skills, designs, dyeing practices, pre and post loom processes, finishing, packaging, and labeling, would be provided keeping the different market segment in mind.
- Special efforts would be made to take the cluster into export, led growth for which the product image and brand building would be promoted.

The cluster would be linked to effective BDS (Business Development Service) providers. Potential BDS would be identified in local and nearby areas and developed through training and exposure.
Six treadle and design development
• The role of support institutions vis-à-vis the cluster would be strengthened.
• In all development efforts the weavers would be the focus group with special emphasis on youth and women to impart greater dynamism and sustainability.
• The health and social needs of the weavers would be given an ongoing attention.
• Socially responsible behaviors’ and fair-trade practices would be promoted among the upper crust of the cluster i.e., among the traders and master weavers.
• The strategy would be made operational through the following:
• Setting up the Common Facility Centre and transform it into a powerful technical Resource Centre. The CFC would also work as an institution for the capacity building of local weavers for value added products by providing regular feedback from the market.
• Developing small networks to promote cooperation and enhance competitiveness of the cluster.
DRAFT ACTION PLAN

• The strategy in Poiranga would be to break isolation amongst the producers/master weavers and weavers, and between them and the support institution and the policy environment. This is a pre-requisite for accessing markets and developing competitiveness. In other words developing the social capital and the inter linkages between the key players would be the underlying theme of all interventions.

• Marketing:
  • ● Develop Website
  • ● Common Brochures.
  • ● Product diversification and sampling
  • ● Marketing strategy through national and international consultants.
  • ● Participation in national and international trade fairs, melas, etc.
  • ● working on the possibility of using Poiranga trade mark
  • ● designing of posters, leaflets, etc.
  • ● Collective participation, exposure visits, buyer sellers meet at selected cities, cluster visits and study tours.

• Quality Improvement and Design Development:
  • ● Technology up gradation for pre loom activities.
• Up gradation of on loom technologies: to diversify into furnishing and to improve quality.
• Training on computer based designs and patterns.
• Design up gradation consultancy services
• Improve dyeing techniques
• Training of product quality checkers
• Exploring possibility of vegetable dyes
• New colors, designs, and layouts.
• New technology and new types of raw material
Creation of social capital:

- Creation and capacity building for specialized networks
- Creation of a Raw Material Purchase Network
- Initiating process for setting up of fund for taking up issues like health, education, environment etc.
- Empowering local institutions for better management of local resources/ exposure visits.
- Strengthening and optimizing the use of the CFC as a Resource Centre.
Unit wise survey

- **Unit 1**
  - Name of the owner: Pabitra Rabha
    Vill- East Poiranga
  - Boko, Kamrup
  - Contact No.9613133499
  - Age: 30 female
  - MSME: Mahila Self Help Group
  - Product: Mekhela Chadar, Eri Shawl,
  - Stoles, Kanbang, Kurta Material, Table
  - mat, Tasar Fabric etc
  - Looms: 2 No of Fly shuttle frame loom
  - with 120 hooks Jacquard
Unit 2

Name of the owner: Tulika Rabha
Vill- East Poiranga
Boko, Kamrup
Contact No. 9613133499
Age: 27, female
MSME: Mahila Self Help Group
Product: Mekhela Chadar, Gamucha, Kanbang
Looms: Fly Shuttle loom
• **Unit 3**
  - Name of the owner: Margina Begam
  - Vill- East Poiranga
  - Boko, Kamrup
  - Contact No.9854572440
  - Age: 25 female
  - MSME: Rupali Self Help Group
  - Product: Mekhela Chadar, Gamucha, Kanbang
  - Looms: Fly Shuttle loom

• **Unit 4**
  - Name of the owner: Gitanjali Rabha
  - Vill- East Poiranga
  - Boko, Kamrup
  - Contact No.9577527182
  - Age: 22 female
  - MSME: Mahila Self Help Group
  - Product: Mekhela Chadar, Gamucha, Kanbang
  - Looms: Fly shuttle loom
• **Unit 5**  
  Name of the owner: Bisoya Rabha  
  Vill- East Poiranga  
  Boko, Kamrup  
  Contact No.nil  
  Age: 28 female  
  MSME: Bowani Self Help Group  
  Product: Mekhela Chadar, Gamucha, Kanbang  
  Looms: Fly shuttle loom

• **Unit 6**  
  Name of the owner: Mahima Rabha  
  Vill- East Poiranga  
  Boko, Kamrup  
  Contact No.9854816212  
  Age: 26 female  
  MSME: Milijuli Self Help Group  
  Product: Mekhela Chadar, Gamucha, Kanbang, Hanker ship, Shawl  
  Looms: Fly shuttle loom
• **Unit 7**
  - Name of the owner: Bharati Rabha
  - Vill- East Poiranga
  - Boko, Kamrup
  - Contact No. 9854816212
  - Age: 27 female
  - MSME: Milijuli Self Help Group
  - Product: Mekhela Chadar, Gamucha, Kanbang, Aarnai
  - Looms: Fly shuttle loom

• **Unit 8**
  - Name of the owner: Purnima Rabha
  - Vill- East Poiranga
  - Boko, Kamrup
  - Contact No. 7399262180
  - Age: 27 female
  - MSME: Milijuli Self Help Group
  - Product: Mekhela Chadar, Gamucha, Kanbang, Aarnai
  - Looms: Fly shuttle loom
• **Unit 9**
  - Name of the owner: Reboti Rabha
  - Vill- East Poiranga
  - Boko, Kamrup
  - Contact No. 9854816212
  - Age: 27 female
  - MSME: Milijuli Self Help Group
  - Product: Mekhela Chadar, Gamucha, Kanbang, Aarnai
  - Looms: Fly shuttle loom

• **Unit 10**
  - Name of the owner: Mina Rabha
  - Vill- East Poiranga
  - Boko, Kamrup
  - Contact No.
  - Age: 27 female
  - MSME: Pub Poiranga Self Help Group
  - Product: Mekhela Chadar, Gamucha, Kanbang, Aarnai, Rappers
  - Looms: Fly shuttle loom
• **Unit 11**
  - Name of the owner: Mira Rabha
  - Vill- East Poiranga
  - Boko, Kamrup
  - Contact No. 7399777502
  - Age: 27 female
  - MSME: Milan Self Help Group
  - Product: Mekhela Chadar, Gamucha, Kanbang, Stoles
  - Looms: Fly shuttle loom

• **Unit 12**
  - Name of the owner: Morjina Ahmed
  - Vill- West Poiranga
  - Boko, Kamrup
  - Contact No. 7399145405
  - Age: 25 female
  - MSME:
  - Product: Mekhela Chadar, Gamucha, Stoles, Shawl, Eri Fabric
  - Looms: Fly shuttle loom
• **Unit 13**
  - Name of the owner: Shahida Bibi
  - Vill- West Poiranga
  - Boko, Kamrup
  - Contact No. 9577401211
  - Age: 32 female
  - Product: Mekhela Chadar, Gamucha, Eri Stoles, Shawl, Eri Fabric
  - Looms: Fly shuttle loom

• **Unit 14**
  - Name of the owner: Hasina Bibi
  - Vill- West Poiranga
  - Boko, Kamrup
  - Contact No.
  - Age: 31female
  - Product: Mekhela Chadar, Gamucha, Stoles, Shawl, Eri Fabric
  - Looms: Fly shuttle loom
• **Unit 15**
  - Name of the owner: Sajina Bibi
  - Vill: West Poiranga
  - Boko, Kamrup
  - Contact No. 9854583531
  - Age: 30 female
  - Product: Mekhela Chadar, Gamuchha, Stoles, Shawl, Eri Fabric
  - Looms: Fly shuttle loom

• **Unit 16**
  - Name of the owner: Safatan Begam
  - Vill: West Poiranga
  - Boko, Kamrup
  - Contact No.
  - Age: 32 female
  - Product: Mekhela Chadar, Gamuchha, Stoles, Shawl, Eri Fabric
  - Looms: Fly shuttle loom
• **Unit 17**
  
  • Name of the owner: Pomila Bibi
  • Vill- West Poiranga
  • Boko, Kamrup
  • Contact No.
  • Age: 33 female
  • Product: Mekhela Chadar, Gamucha,
    Stoles, Shawl, Eri Fabric
  • Looms: Fly shuttle loom

• **Unit 18**
  
  • Name of the owner: Amina Bibi
  • Vill- West Poiranga
  • Boko, Kamrup
  • Contact No.
  • Age: 35 female
  • Product: Mekhela Chadar, Gamucha, Stoles, Shawl, Eri Fabric
  • Looms: Fly shuttle loom
• **Unit 19**
  - Name of the owner: Pinjira Begam
  - Vill- West Poiranga
  - Boko, Kamrup
  - Contact No. 9401083379
  - Age: 32 female
  - Product: Mekhela Chadar, Gamucha, Stoles, Shawl, Eri Fabric
  - Looms: Fly shuttle loom

• **Unit 20**
  - Name of the owner: Hamida Bibi
  - Vill- West Poiranga
  - Boko, Kamrup
  - Contact No.
  - Age: 35 female
  - Product: Mekhela Chadar, Gamucha, Stoles, Shawl, Eri Fabric
  - Looms: Fly shuttle loom
• **Unit 21**
  • Name of the owner: Fatema Begam
  • Vill- West Poiranga
  • Boko, Kamrup
  • Contact No.
  • Age: 32 female
  • MSME:
  • Product: Mekhela Chadar, Gamucha, Stoles, Shawl, Eri Fabric
  • Looms: Fly shuttle loom

• **Unit 22**
  • Name of the owner: Sofiya Bibi
  • Vill- West Poiranga
  • Boko, Kamrup
  • Contact No.
  • Age: 25 female
  • MSME:
  • Product: Mekhela Chadar, Gamucha, Stoles, Shawl, Eri Fabric
  • Looms: Fly shuttle loom
a. Study of existing Product design, redesign, new product Development and product diversification

ISSUES and CONCERNS:
1. The existing products consist of traditional design and motifs with very few contemporary designs.
2. The products are made of Acrylic, cotton, and silk (specially eri silk) as the artisans can’t afford only silk yarn.
3. The products are made of but do not maintain the quality of the product and the standard size as requirement of the buyer.
4. The eri shawl made of fine eri yarn but lake in selvedge and texture. Pure eri shawl/stoles made by the weavers is very attractive but use of designed thread is acrylic made the product very poor look by the buyer.
5. The existing product Makhela-chadar, gamosa, kangbang are used by the local people as a traditional wear and during festivals.
6. The finishing of the products is very poor as the product have not been processed for softening.
7. There is no product diversification.
8. Some of the raw materials like hand spun eri silk yarn are not good quality such as to use as warp yarn.
9. The quality and purity of silk is doubtful and there is no method available in the cluster to measure it.
10. The traditional shawl and Mekhela-chadar is not made by standard size because of sink age of the fabric.
11. The pre-weaving process is not done properly as the weaver have to know the knowledge of texture, pitch, and reed count.
12. The lack of branding and Quality Certification makes it very difficult for the weaver to win trust of buyer.
OPPORTUNITIES:

1. There is a good scope for redesigning of the existing traditional products.
2. The existing traditional products can be made softer, good textures and with standard size.
3. The existing traditional motives can be used for new product development and diversification.
4. Textiles and craft can be combined for new product development.
5. Instead of using acrylic yarn as designed thread it can be used silk or cotton yarn for better development and quality control.
6. The product and existing traditional wears can be used to introduce fashion accessories, furnishings product such as cushion cover, table met, curtain, bed-sheet and bags.
7. Using the traditional motifs will give the product a local identity.
• **Marketing & Designing:**

The designing capacities of the cluster have not kept pace with time. The art of traditional designing has declined as the best design masters have passed away and the present ones have limited capacities and means to upgrade themselves. There are no modern day designers are working in the cluster and even though in the past some state agencies have hired them in the past, the benefit of their work has not passed to the cluster in any sustainable way. They have only worked in a static mode as one-off interventions. There is a total alienation of the weaver from fashion forecasting issues. As a result, the majority of weavers remain untouched by issues relating to design and product development.

Sales exhibitions organized by Government agencies throughout India as a strong medium. But sadly, these have been monopolized by a select few Master Weavers and Traders. Due to a premium on such channels, there are invariable cases of bulk false-named bookings and resale of facilities, which further cuts the chances of marketing for poorly networked weavers.

Most of the production is for domestic market. Even though there have been small export orders yet the cluster actors are uninformed about the actual details of such sales i.e., country of sale, acceptance/rejection, required documentation and procedures. Hence the cluster has not benefited in terms of information generation relating to exports. In the state sponsored international visits, the official representing the cluster gives little feedback to the real cluster actors. The weaver’s knowledge of consumer behavior and market trends continues to be negligible.
* The domestic market for handloom products is also changing. The consumer is becoming more discerning and would like to purchase handlooms on the basis of value and merit, and not solely to show empathy.

* There is a general trend in the market for customized and small lots. Therefore, there is need to prepare the weavers in a different customized mode, which can also become the core competence of the handloom products.

* Along with the importance of traditional marketing channels like exhibition and sales in Indian cities, etc. the new channels such as e-commerce need to be explored. There is very good private sector player’s on-line marketing of eri handloom in small and customized lots.

**Institutional linkages & Capacity Building**

The quality of Poiranga products is becoming a critical consideration in marketing especially for high-end consumers and export marketing. Therefore it is required to reposition Poiranga, may be on a quality based branding.

There is a poor access to information within the cluster. For instance, the visits of designers to the cluster, even those sponsored by the Government agencies are not properly known to the weaver, which results in a limited interface,
The Resource centers in the state though upgraded significantly still lacks in effective usage. Presently, the courses conducted by the training centre need total revamping and should be based on the skill development and capacity building and not just on how to weave. The other facilities in the resource centers like CAD, dyeing etc. need wide publicity and monitoring by private sector. The general lack of information or sufficient exposure of the local staff also impedes the exploitation of such facilities.

There is no system in place through which the cluster can effectively make use of the BDS (Business Development Services) providers. Even though diverse BDS resources the present locally, they face several limitations in the absence of effective institutional framework and therefore do not have a well-defined presence. The local BDS also need more training and exposure.

The impact of globalization poses a threat to the cluster. Therefore, it is necessary to have an effective sustainable development strategy for ensuring a sustainable future.

A number of State and Central Government agencies like the Directorate of Handlooms, Sericulture Department, ARTFED, Department of Rural Development, Khadi and Village Industries Board, Khadi Commission, Central Silk Board, the Development Commissioners, Govt. of India, and others in the Handlooms and Handicrafts sectors operate different schemes. Each one of them works in a standalone mode. There is a need to have better synergy and coordination amongst them so that they avoid duplication and optimize returns at the cluster level.
b. Scope for research and development direction for future

ISSUES and CONCERNS:
1. They do not have enough funds, time and expertise to carry out research and development and product diversification.
2. The looms used are very outdated and don’t have resources to introduce new technology in handlooms.
3. The quality of products is compromised due to insufficient delivery time and lack of technology which facilitates and increase speed of work without compromising on quality.

Opportunities
● Improvisation in handlooms, accessories, and pre-weaving process through R&D activities.
● A Common Facility Centre (CFC) can be set up for skill development in handlooms with modern technology.
● Marketing Research in terms of consumer trends, market trends and competition in the local and international market.
● Exchange of technology ideas can be initiated through CFC
c. Existing status and opportunity for visual identity, branding and communication design

ISSUES and CONCERNS:
1. There is absolutely no visual identity for the clusters as they rarely sell the products directly to the buyer.
2. There is no proper documentation/ catalogue brochures of the products made in Poiranga.

OPPORTUNITIES:
1. The idea of having a common visual identity and branding for the cluster was well accepted.
2. However it was felt that it should go in sync with initiatives like online selling portal, packaging product design, labeling etc.
3. So there is a big scope in developing visual identity for the cluster units, branding and
communication design to connect them to the market directly and get them more exposure.

A product catalogue with specification of the product and delivery status is must and also presence of products online will be of great help and reach to the buyer.

A comprehensive documentation of Eri Silk yarn as a non-violence silk in the world should be published as marketing brand of eri Ahimsha silk

The concept of common brand building like ‘Poiranga eri product ’ will help them to create an identity for themselves.
d. Scope of technology, modernization and design collaborations

ISSUES and CONCERNS:
* The looms used by the weavers are traditional frame loom which is very poor for large production. The use of fly shuttle loom with standard frame and attachment of jacquard is resulting high-production is minimum time.
The weaving accessories used by the weavers is very outdated and it cause time consuming in pre-weaving process. There are so many scope to accept modern technology and accessories for pre-weaving process
* There is no facility of softening and processing of product only some product have done calendaring work.
* Even in case of bulk orders for the same products, whether it made by different weavers in different looms it cause no similarity of the same product.

OPPORTUNITIES:
* Calendaring and finishing unit can be set up in the common facilitation centre.
* The knowledge of dying and finishing should be done in CFC and use of vegetable dyes should be introduced as these dyes are easily available in households. So it cause low costing in dyed fabrics.
e. Scope for operations and process innovation from design perspective

A. ISSUES and CONCERNS:
1. Due to heavy fluctuations in eri silk yarn prices, weavers can’t afford to invest in product development.
2. The weavers have to buy raw materials from Boko in Kamrup District from wealthy businessmen who exploit them and have a monopoly.
3. The weaver used to give time only when they free from the household works for products.
4. Only female weavers are engaged in weaving process resulting a low production and delivery time increased.
5. For design development only manual designs are used and no use of computer added textile designs resulting different fault in design motifs and not accepted color combination.
OPPORTUNITIES:

1. The production time should be increased by use of modern handlooms and accessories and to be adopt modern technology.

2. Design should be developed by CAD system so that proper colour combination and no fault in design motifs and design should be accepted by the buyer and it should be considered as per the trends.

3. Take up and let of motion should be introduced in handlooms for higher production.

4. For better production weaver can be use fiber shuttle and finishing of velvet cloth in the sley becomes smoother movement of shuttle for higher production.

In pre-weaving process weavers can used high speed/motorised charkas for bobining and warping should be done in motorized warping drum.
f. Design Opportunity in workstation and tooling design

ISSUES and CONCERNS:
* The work process is really slow due to hand made nature of the process.
* The handloom accessories used are outdated and old, leads to slow and time consuming production process.
* The work place is not appropriate, cluttered and not organized.
* There is no proper lighting system for working in night hours.
* In case of no electricity weavers work in only day time which can result in less of productivity.
* While working in the open, there is loss of precious metals like gold and silver, which artisans don’t realize. This is caused due to blowing of winds and no proper way of preventing waste.
* The sitting position for the weavers is not proper so they feel back pains after they work long periods in the looms.
* The weaving accessories are kept with no proper arrangement or storage, leads to damage of it.

OPPORTUNITIES:
* The new handloom accessories for bobining, pirn winding etc can be introduced at common facilitation centre.
* Organized work stations at CFC.
* Solar lights can be introduced so that they could work in the evening hours.
g. Details of market and competition study for design advantage and distinction

ISSUES and CONCERNS:
* Decrease in profit margins due to exploitation by the traders and increase in the cost of raw materials.
* Buyers / Traders are not ready to pay higher prices for the products.
* There is a serious competition from outside of the clusters.
* Already some of independent entrepreneur in Assam are making better quality products with few variations as per consumer needs.
* No exposure to the market and interaction, as middlemen/ traders buy products from the weavers and sell it in the market.
* As there is no interaction with the market, the artisans rarely have any direct consumer feedback.

OPPORTUNITIES:
* Product diversification using traditional techniques and motifs will give them distinctive
advantage as these designs will not be manufactured elsewhere.
* They can introduce new accessories which could give them a bigger market share.
* They could reach out to larger markets like Metro cities with new product developments.
* They could directly sell products to the consumers through boutiques etc.
h. Study for the need of training and skill up-gradation

- **ISSUES and CONCERNS:**
  - Some skilled weaver leave but very few weavers are trained regularly and enrolled to keep the pace of work smoothly.
  - Majority of weavers have not skilled training of jacquard weaving for better production.
  - No new/advance training for the weavers except a very few.
  - Due to lack of exposure weavers have been practicing same processes for many years.
  - Residents who are educated move to city for better work prospects.

- **OPPORTUNITIES:**
  - Master weavers could be sent to participate at National level exhibitions.
  - A common training center which could provide training on skill enhancement, quality control and product development to the weavers of Poiranga.
  - A skill up gradation course/curriculum can be introduced with expert guidance.
i. Description of ergonomic and environment factors in MSME

- The process of design making in traditional way is so difficult and time consuming and weavers suffer so many eye-sight problems.
j. Packaging and logistics related design opportunities

- **ISSUES and CONCERNS:**
  - There is no real concept of packaging at the cluster level.
  - No unique identity for the Poiranga eri products.
  - Products are kept either in a plastic carry bag or kept in a paper.
  - Weavers carry products in plastic carry bags only from one city to the other for sale. During transport it gets default in finish product.
  - There are no any labelling of product specification and quality point of view so that buyer can trust about the product.
  - There is also chances of theft during commuting from city to other.
  - No insurance cover.

- **OPPORTUNITIES:**
  - New packaging design can be introduced such as paper bags and box.
  - These bags will give a visual and unique identity to the products made in the cluster.
  - New and cost effective form of packaging needs to be introduced.
  - If packaging is improved, it would create a good presence and will boost the business and help in competing.
  - Create a possibility to safely pack to avoid damage.
k. Exhibition/ Display design opportunities

- **OPPORTUNITIES:**
  - The weavers can participate in trade fairs and expos at state, national and international level.
  - At cluster/village level a small display area/showroom can be created.
  - Handloom products from Poiranga are sold in Guwahati, but there is no display center in the Poiranga village for buyers coming directly to the village.
  - Products can be displayed at some of the prominent places like airport, railway stations etc.
I. Study of infrastructure set up from design perspective

- There is no proper work shed for the weavers so that looms and fabrics would be safe from rain water or sunlight.
- No in house display area for the products.

OPPORTUNITIES:
- A common work place for the weavers should be set up in the village or concept of CFC.
- A proper display area can make it attractive for consumers.
m. Scope of design intervention for inter cluster communication

- OPPORTUNITIES:
  - * There can be development of proper linkages between cluster and raw material market in Boko and Guwahati.
  - * A common place for procurement of raw material which could be called as yarn bank could be set up for the weavers from where they can buy material on credit basis, as its not feasible for them to buy raw material at once.
  - * A greater and better cooperation and understanding between the weavers and the traders/middlemen.
  - * A Common Facilitation Centre will tremendously increase the scope of communication between various weavers and thus lead to sharing of knowledge and skills.
  - * Also there could be a need of communication between Poiranga and other clusters which is making eri product.
CONCLUSION

• The visit to Poiranga handloom Cluster at Boko, Kamrup was a great learning and enriching experience; giving various insights into their design activities, functioning and working conditions. The trip led to discovery of many facts and figures.

• One of the major findings where that the weavers are not efficient/ educated enough to calculate the right costing and selling price for their products. While calculating cost they don’t include number of working hours and waste of material during manufacturing. So generally they sell the product at a approximate price on the basis of the cost of material used.

• Their products with least profit margins. The middleman buy the products from the weavers and sell it for 2-3 times the price charged by the weavers. Middleman have a hard time selling their products in retail stores in Guwahati.
• ANALYSIS OF SURVEY

Survey Findings:

• The survey interviewed 30 MSME in Poiranga who are engaged in some form of *Handloom work*.

• It is seen that large families are common. About 98% of the families are larger than 4 members each. In fact about 70% of the families have seven or more members each.

• Families pursue multiple occupations. It was seen that about 77% of the families follow three or more occupations.

• Among the occupations the survey revealed that agriculture/horticulture, animal husbandry, poultry and fishery are the most common.

• Most of the families by and large have ownership of land. 490 out of 500 families clearly own some land or the other.
• A single family may rear, spin, weave—do any or all of these. However, the most popular combination is that of spinning and weaving. 38% of the families do this.

• Rearing and spinning combination does not exist, while just 6% of the families practice all three. Out of the interviewed families 13% do only weaving. On the whole, 51% of the interviewees weave. One $\frac{2}{3}$ of the rearers spins and/or weaves. Rearing, thus, is substantially a standalone activity at the family level.

• 45% of those who weave (116 out of 256) are the ones who buy ready yarn. However, they buy in small quantities, largely up to 4 kgs each.

• Out of the eri products, men’s shawl is the staple product. On an average the output per weaver is around 4 to 5 ‘jodas’ or pairs. The weavers sell mainly to the traders. Some of them however want to sell to cooperatives but generally the cooperatives have their own weavers. Quite a few of the interviewed have had some kind of exposure at the ‘melas’, fairs, etc. A small amount, around 17%, of the weavers are aware where the products finally go only about how their product can find any buyer locally. A very few of the families have done some kind of embroidery work on their products but this is not limited to weavers families alone. The tradition of embroidery is not predominant in Poiranga. Major of the families are members of Self Help Groups.
SWOT ANALYSIS OF THE CLUSTER

• The analysis has been done keeping in mind the historical, geographical, social, economic, design point of view and as per guidelines of DCS and industry related core issues and conditions existing in the cluster.

• The following chart lists the SWOT components and their implications, which are the likely points of interventions and the basis of a long run strategy.

**Strengths & Implications:**

1. The cluster’s tradition of weaving *eri* products and the availability of *eri* silk which is almost like wool and is considered non-violent/eco-friendly.

   2. The rich resource of weaving and design skills.

   - Enables product diversification and value addition.

3. Inherent strengths of Poiranga vis-à-vis other handlooms.

   - Facilitates brand name and marketing.

4. The readiness of the new generation to enter this trade.

   - Will prevent the craft from languishing.
• **Weakness & Implications:**
  
  1. Lack of awareness on *eri* silk in the national market except in few states of northern India – Dominance of market by other products such as synthetic dress material, synthetic saris. Etc.
  
  2. Absence of social security – Encourages captive buying by the big traders, master weavers and encourages distress selling.
  
  3. Narrow product range and geographical spread of market not very wide

  - Creates a bad Product-Image.

  4. Dearth of capital investment in the industry.

  - Outdated looms & technology, leading to outdated products & inability to comply with the new requirements.

  5. Weaver is socially, financially, and marketwise backward and vulnerable.

  - Prevents innovation, encourages social ills and distress selling.

  6. The industry is not well linked to the global markets and fashion dynamics

  - Poor Exports

  7. Poor gender sensitization: unpaid women workers with no social or medical security

  - Poor family earnings and insecurities.

  8. Limited scale of activity dilutes interest of officials, agencies, researchers, entrepreneurs, exporters and marketing outfits - keep potential interventions away from the sector and thus deprives it of opportunities for growth.
• **Opportunities & Implications:**
  1. The keenness of women and new generation to learn and progress.
     - Shall enable effective interventions.
  2. Unique product character and amenability of the product for diversification according to fashion dynamics
     - Will lead to market expansion and innovation.

• **Threats & Implications:**
  • Limited rearing of *eri* silkworm and competing demand from outside states for *eri* cocoon – Potential to kill *eri* handloom handloom weaving fully.
  • Limited scale and poor visibility – If overtaken by market forces there is a chance of the activity dying out.
• Submitted by Design Consultant: Dibakar Choudhury
• dibakar20007@yahoo.co.in
Design Clinic Scheme for Design Expertise

to MSMEs, a unique and ambitious design intervention scheme for the country’s large micro, small and medium scale enterprises, is an initiative of Ministry of MSME, Government of India has been launched under National Manufacturing Competitiveness program. The scheme is being designed keeping in mind the objective of design awareness, design interventions and competitiveness improvement for largest group of industrial sectors, Micro, small and medium enterprises of the country which contributes to approximately 45% of total industrial production and 40% exports. They are major contributors to the GDP growth, accounting to about 8%. They
Interactive Design Study

• They are also the largest employers after agriculture, employing an estimated 41 million people.
• The main objective of the Design Clinic Scheme is to bring MS&ME sector and design expertise into a common platform and to provide expert advice and solutions on real time design problems, resulting in continuous improvement and value addition for existing products. This model brings design exposure to the door step of industry clusters for design awareness, improvement, evaluation, analysis and design related intervention. Design clinic scheme will assist industrial clusters to open a channel for design information inflow for creative, innovative and futuristic approach towards the product, process, operations, manufacturing and business design. The scheme will help generate insight for opportunity identification and design intervention for competitive and breakthrough solutions for
The total scheme budget will be Rs. 73.58 crores, out of which Rs. 49.08 crores will be GoI assistance and the balance amount will be contributed by the beneficiary MSMEs. The scheme provides great opportunity to the large sector of MSME (Associations and Units) as well as Indian design fraternity – the design consulting firms, independent designers, various design institutes of the country and also the design students to engage them to assist the country’s large MSME sector move up the value chain through increasing the value and competitiveness of their products and services. The scheme targets to reach out to about 200
DCS MSME Scheme

MSME clusters over the next two and half years. This will be achieved through organization of about 200 design sensitization seminars, 200 Design Clinic Workshops and 400 design projects including 100 student design projects (final year thesis projects). National Institute of Design (NID), Ahmedabad will assist the Ministry of MSME, Government of India, as a nodal agency for implementing the scheme. As part of the scheme a

- Design Clinic Centre and its regional centers are being set up in IIE campus
• The approach of the **Indian Institute of Entrepreneurship, Guwahati** is to meet the demand for intervention through DCS under Ministry of MSME implemented by NID, Ahmedabad. Only if there is demand for certain service or product, will the beneficiaries be ready to not only pay for the services, but also make the best use of those. And no intervention can be sustainable unless all local industry have stakes in the process of cluster development for their own benefit.
The attempt of this NAS is to identify that unit of Poiranga in BOKO so that the purpose of the cluster level initiatives will be to build local industry (handloom) competitiveness, poverty alleviation, employment generation and also building local governance systems. The entry route of the Institutions will vary as per its mandate and competencies. These areas may be technology up-gradation, entrepreneurship building, skill development, livelihood promotion, quality up-gradation, market linkage facilitation, Design development etc.
POIRANGA AND ADJOINING AREAS OF SOUTH KAMRUP, ASSAM

• INTRODUCTION

The Poiranga handloom cluster is situated in South Kamrup in Boko areas. The location of South Kamrup is as follows: Nagaon district is on the east and southern part of Goalpara district on the West, the Bramhaputra river on the North and the hills of Meghalaya on the South.
As for the socio-cultural milieu, South Kamrup is divided into two regions by the city of Guwahati. It stands at a point and the two regions lying to the east and west of it are more or less separated in respect of socio-cultural relations. Though South Kamrup is inhabited by tribal and non-tribal population, it is primarily dominated by non-tribal. It is seen that the border areas are covered by the tribal population excluding riverside area of Bramhaputra. Among the tribal, the Rabhas are largest in number followed by the Bodos.
Raw Material:
The following strategy would be adopted: As the cluster is dynamic with increasing turnover and capacity of looms over the last decade, the primary thrust would be to enhance its competitiveness by bringing synergy between the different segments and players in the cluster. The cluster will be viewed as an organic whole with diverse groups, each of which needs to be strengthened in coordination with the other.

- The private sector would be empowered to steer its own route through the development of Local Institutions, Networks, Consortia, and Self-Help-Groups.

- Quality awareness and related training in the areas of up gradation of skills, designs, dyeing practices, pre and post loom processes, finishing, packaging, and labeling, would be provided keeping the different market segment in mind.

- Special efforts would be made to take the cluster into export, led growth for which the product image and brand building would be promoted.

The cluster would be linked to effective BDS (Business Development Service) providers. Potential BDS would be identified in local and nearby areas and developed through training and exposure.
Six treadle and design development
• The role of support institutions vis-à-vis the cluster would be strengthened.
• In all development efforts the weavers would be the focus group with special emphasis on youth and women to impart greater dynamism and sustainability.
• The health and social needs of the weavers would be given an ongoing attention.
• Socially responsible behaviors’ and fair-trade practices would be promoted among the upper crust of the cluster i.e., among the traders and master weavers.
• The strategy would be made operational through the following:
  • Setting up the Common Facility Centre and transform it into a powerful technical Resource Centre. The CFC would also work as an institution for the capacity building of local weavers for value added products by providing regular feedback from the market.
  • Developing small networks to promote cooperation and enhance competitiveness of the cluster.
ESSENTIAL ACTION PLAN

• The strategy in Poiranga would be to break isolation amongst the producers/master weavers and weavers, and between them and the support institution and the policy environment. This is a prerequisite for accessing markets and developing competitiveness. In other words developing the social capital and the inter linkages between the key players would be the underlying theme of all interventions.

• Marketing:
  • ● Develop Website
  • ● Common Brochures.
  • ● Product diversification and sampling
  • ● Marketing strategy through national and international consultants.
  • ● Participation in national and international trade fairs, melas, etc.
  • ● working on the possibility of using Poiranga trade mark
  • ● designing of posters, leaflets, etc.
  • ● Collective participation, exposure visits, buyer sellers meet at selected cities, cluster visits and study tours.

• Quality Improvement and Design Development:
  • ● Technology up gradation for pre loom activities.
● Up gradation of on loom technologies: to diversify into furnishing and to improve quality.
● Training on computer based designs and patterns.
● Design up gradation consultancy services
● Improve dyeing techniques
● Training of product quality checkers
● Exploring possibility of vegetable dyes
● New colors, designs, and layouts.
● New technology and new types of raw material
Creation of social capital:

- Creation and capacity building for specialized networks
- Creation of a Raw Material Purchase Network
- Initiating process for setting up of fund for taking up issues like health, education, environment etc.
- Empowering local institutions for better management of local resources/exposure visits.
- Strengthening and optimizing the use of the CFC as a Resource Centre.
opportunity areas, remedial design solutions and potential design project

ISSUES and CONCERNS:
1. The existing products consist of traditional design and motifs with very few contemporary designs.
2. The products are made of Acrylic, cotton, and silk (specially eri silk) as the artisans can’t afford only silk yarn.
3. The products are made of but do not maintain the quality of the product and the standard size as requirement of the buyer.
4. The eri shawl made of fine eri yarn but lake in selvedge and texture.
   Pure eri shawl/stoles made by the weavers is very attractive but use of designed thread is acrylic made the product very poor look by the buyer.
5. The existing product Makhela-chadar, gamosa, kangbang are used by the local people as a traditional wear and during festivals.

6. The finishing of the products is very poor as the product have not been processed for softening.

7. There is no product diversification.

8. Some of the raw materials like hand spun eri silk yarn are not good quality such as to use as warp yarn.

9. The quality and purity of silk is doubtful and there is no method available in the cluster to measure it.

10. The traditional shawl and Mekhela-chadar is not made by standard size because of sink age of the fabric.

11. The pre-weaving process is not done properly as the weaver have to know the knowledge of texture, pitch, and reed count.

12. The lack of branding and Quality Certification makes it very difficult for the weaver to win trust of buyer.
Design Solution:

1. In Workshop the remedies of is given to the weaver about redesign and value addition of fabric by using vegetable dye and Tie & dye.
2. The existing traditional products are made softer, good textures and with standard size.
Scope of Design Project

As the Poiranga Handloom Cluster has a very potential of product and marketing of Eri Silk Product, There could be a done a design project for the benefit of MSME unit of Poiranga. Lots of things has to be done in design project like

1. prototype development. The existing traditional motives is used for new product development and diversification.

4. Textiles and craft can be combined for new product development.

5. Instead of using acrylic yarn as designed thread it can be used silk or cotton yarn for better development and quality control.

6. The product and existing traditional wears can be used to introduce fashion accessories, furnishings product such as cushion cover, table met, curtain, bed-sheet and bags.

7. Using the traditional motifs will give the product a local identity.
• **Marketing & Designing:**

The designing capacities of the cluster have not kept pace with time. The art of traditional designing has declined as the best design masters have passed away and the present ones have limited capacities and means to upgrade themselves. There are no modern day designers are working in the cluster and even though in the past some state agencies have hired them in the past, the benefit of their work has not passed to the cluster in any sustainable way. They have only worked in a static mode as one-off interventions. There is a total alienation of the weaver from fashion forecasting issues. As a result, the majority of weavers remain untouched by issues relating to design and product development.

- Sales exhibitions organized by Government agencies throughout India as a strong medium. But sadly, these have been monopolized by a select few Master Weavers and Traders. Due to a premium on such channels, there are invariable cases of bulk false-named bookings and resale of facilities, which further cuts the chances of marketing for poorly networked weavers.

- Most of the production is for domestic market. Even though there have been small export orders yet the cluster actors are uninformed about the actual details of such sales i.e., country of sale, acceptance/ rejection, required documentation and procedures. Hence the cluster has not benefited in terms of information generation relating to exports. In the state sponsored international visits, the official representing the cluster gives little feedback to the real cluster actors. The weaver’s knowledge of consumer behavior and market trends continues to be negligible.
* The domestic market for handloom products is also changing. The consumer is becoming more discerning and would like to purchase handlooms on the basis of value and merit, and not solely to show empathy.

* There is a general trend in the market for customized and small lots. Therefore, there is need to prepare the weavers in a different customized mode, which can also become the core competence of the handloom products.

* Along with the importance of traditional marketing channels like exhibition and sales in Indian cities, etc. the new channels such as e-commerce need to be explored. There is very good private sector player’s on-line marketing of eri handloom in small and customized lots.

**Institutional linkages & Capacity Building**

The quality of Poiranga products is becoming a critical consideration in marketing especially for high-end consumers and export marketing. Therefore it is required to reposition Poiranaga, may be on a quality based branding.

There is a poor access to information within the cluster. For instance, the visits of designers to the cluster, even those sponsored by the Government agencies are not properly known to the weaver, which results in a limited interface,
The Resource centers in the state though upgraded significantly still lacks in effective usage. Presently, the courses conducted by the training centre need total revamping and should be based on the skill development and capacity building and not just on how to weave. The other facilities in the resource centers like CAD, dyeing etc. need wide publicity and monitoring by private sector. The general lack of information or sufficient exposure of the local staff also impedes the exploitation of such facilities.

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### Schedule of 5 Day design Workshop under DCS at Poiranga Handloom Cluster

<table>
<thead>
<tr>
<th>Day</th>
<th>1st Session (Time)</th>
<th>Topics</th>
<th>Designer/Guest designer/Resource Person</th>
<th>2nd Session (Time)</th>
<th>Designer/Guest designer/Resource Person</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st day</td>
<td>10.00AM to 1.00PM</td>
<td>Inauguration of Workshop</td>
<td>---------------------------------------</td>
<td>2.00PM to 4.00PM</td>
<td>Dibakar Choudhury, Empanel Designer DCS</td>
<td>Knowledge of Different type of Handloom Product and its Indian and international size</td>
</tr>
<tr>
<td>2nd Day</td>
<td>10.00AM to 1.00PM</td>
<td>Scouring, Bleaching and Degumming of Handloom Product</td>
<td>Mr. F. Hoque, Technical Resource Person, Assam Textile Institute</td>
<td>2.00PM to 4.00PM</td>
<td>Dibakar Choudhury, Empanel Designer DCS</td>
<td>Quality Control of Handloom Product and its Specification</td>
</tr>
<tr>
<td>3rd day</td>
<td>10.00AM to 1.00PM</td>
<td>Eri Silk Fabric Soften and Processing</td>
<td>Mr. F. Hoque, Technical Resource Person, Assam Textile Institute</td>
<td>2.00PM to 4.00PM</td>
<td>Dibakar Choudhury, Empanel Designer DCS</td>
<td>Value Addition and Design Trends colour and cast</td>
</tr>
<tr>
<td>4th Day</td>
<td>10.00AM to 1.00PM</td>
<td>Scope of Block Printing/Screen printing in the Handloom fabric</td>
<td>Mr. Sarbeswar Das, Expert Dyeing and Finishing, WSC, Khanapara</td>
<td>2.00PM to 3.00PM</td>
<td>Dibakar Choudhury, Empanel Designer DCS</td>
<td>Powerpoint Presentation NAS of Poiranga and its discussion about the opportunities</td>
</tr>
<tr>
<td>5th Day</td>
<td>10.00AM to 1.00PM</td>
<td>Packaging and labelling of Handloom Product</td>
<td>--------------------------</td>
<td>3.00PM to 4.00PM</td>
<td>Evaluation and Award of Certificate</td>
<td>--------------------------</td>
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Potential Design Project Opportunities after WORKSHOP

The Workshop of Poiranga cluster is really a good expose to the MSME unit of the cluster. The MSME unit of Poiranga is very capable of work culture and their activities is such that we can add so many intervention in terms of Design, Technology, Diversification, Quality Control, Packaging etc. It is a potential cluster to do a design Project. The final Product Eri and Muga silk is only produce in this cluster all over the country. In where Muga is the most Costs silk in the world which has a huge demand in the export market due to it natural color and texture. Eri is the only such silk which make such a process that it is called “Ahima” silk. A opportunities of potential design project could be done in Poiranga Cluster after the Workshop.