

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts>



1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/introduction>

Introduction

In India, sericulture is a sustainable farm-based economic enterprise generating a higher return per labor/day spent. Sericulture goes through various interrelated activities like mulberry cultivation, silkworm rearing, silk reeling, fabric making, and finishing. However, all these processes are banking on 18% to 23% (approx.) of silk yarn wrapped around the Cocoon, leaving the inner shell unutilized. Apart from the central aspect of silk production, additional revenue could be accrued from the proper utilization of Cocoon by-products. Value addition is achieved by making unique handmade products and their design diversification.

Large quantities of pierced cocoons generated in abundant amounts in grainage operations are being sold at throwaway prices. These cocoons are well utilized to produce value-added products, which have an excellent market both internally and internationally. Awareness programs for trainees in this direction have an encouraging impact enticing the trainees to make the products mentioned above and market the same.



Color Yellow.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/introduction>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Boutonniere.



Table Top Decor.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

[https://dsource.in/resource/silk-cocoon-handicrafts/
tools-and-raw-materials](https://dsource.in/resource/silk-cocoon-handicrafts/tools-and-raw-materials)

Tools and Raw Materials

The tools and raw materials that are used for making silk cocoon handicrafts are:

- **White Cocoon Shells (Bombyx Mori):** It is the basic raw material used in making handicrafts.
- **Pigment / Natural color dyes:** These are used for dyeing cocoon.
- **Scissors:** It is used to cut the Cocoon into the desired shape.
- **Pliers:** It is used to give shapes to metal wires.
- **Carving and Shaping Tools:** These are used for shaping raw cocoons into required manner.
- **Threads and Needles:** These are used for making cocoon garlands.
- **Metal Wire:** It is used for making stalks of cocoon flowers.
- **Colored Threads:** Threads are used to stitch cocoons jointly.
- **Fabric glue:** It is used for sticking decorative items on the fabric.
- **Color Beads (for Accessories):** Beads are used to enhance the look of the crafts.
- **Cutter:** Cocoons are cut using a cutter for making handicrafts.
- **Glue Gun & Glue Sticks:** It is used as an adhesive for making different crafts.

1. Introduction

2. Tools and Raw Materials

3. Making Process

4. Properties of Cocoon

5. Products

6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

[https://dsource.in/resource/silk-cocoon-handicrafts/
tools-and-raw-materials](https://dsource.in/resource/silk-cocoon-handicrafts/tools-and-raw-materials)



White Cocoons (Bombyx Mori).



Pigment dyes.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Scissors, Pliers, Carving and Shaping Tools.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suidha P
IDC, IIT Bombay

Source:

[https://dsource.in/resource/silk-cocoon-handicrafts/
tools-and-raw-materials](https://dsource.in/resource/silk-cocoon-handicrafts/tools-and-raw-materials)



Threads, Needles and Metal Wires.



Colored threads, Colored Beads, and Fabric Glue.



Glue Gun and Cutter.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/making-process>

Making Process

• Sourcing of Cocoon Shells

Cocoon shells are sourced from the silk reeling units and Silkworm Seed production centers after the Silk reeling process.



1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

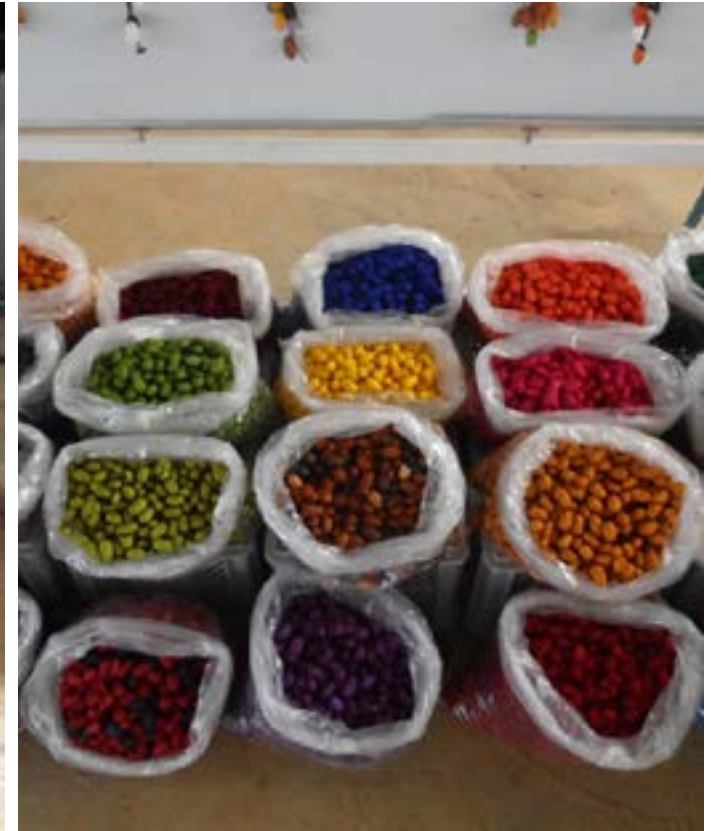
<https://dsource.in/resource/silk-cocoon-handicrafts/making-process>

• Dyeing of cocoon shells

Cocoons are Naturally formed in Half white, White, Golden Yellow, and Greenish yellow. Amongst them, White cocoons offer good feasibility for dyeing in a wide range of colors. Natural pigments and Dyes enhance the value of the product created. However, the chemical dyes which are used to dye the silk yarn are the economical alternative.



Dyeing Process.



Colored Cocoons.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P

IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/making-process>

• Cutting of cocoon shells

Cutting of cocoon shells to required shapes based on the end product.



Cocoon Cut Pieces.



Cocoon Cut Pieces.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/making-process>

- **Assembling of cocoon shells**

Assembling the cut cocoons/ pierced cocoons to arrive at the required artefact.



Assembly Process.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/making-process>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Assembly Process.



Garland Process.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/properties-cocoon>

Properties of Cocoon

Cocoon has properties like shape, texture and color. Different types of craft items are made by choosing right kind of property.

• Shape:

Shapes of the Cocoon are decided based on the handicraft product, which will be produced.

Cocoon shells are of different shapes.

1. White Dumbbell Shape - NB18
2. White Peanut Shape
3. White Spindle Shape - BM
4. White Oval Shape - NB7
5. White round Shape - KA race



1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/properties-cocoon>

• Texture:

Dumbbells and Peanut Shaped cocoons are harder. It requires a little more effort to cut into the required shapes. Usage of sharp and heavy tools to cut the Cocoon gives a perfect form to assemble.

Oval and Round shaped cocoons have the most comfortable texture to cut and pierce. This shaped Cocoon is majorly used to make most of the artefacts.

Spindle Shaped cocoons are very light. It has a texture of close to 200 GSM paper and is very easy to cut. This shaped Cocoon is used appropriately based on the need of the end product.

• Color:

Cocoon's natural texture and formation have a high quality of color absorption when died with the pigment and natural dyes; unlike the cotton dying, it does not require the color fixing post dyeing process. After the Dyeing process, the dyed cocoons are treated with anti-dust spray to increase the artefact's sustenance. However, Anti-dust treatment is optional and depends on the artisan's interest and product.



Color Pink.



Color Yellow.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

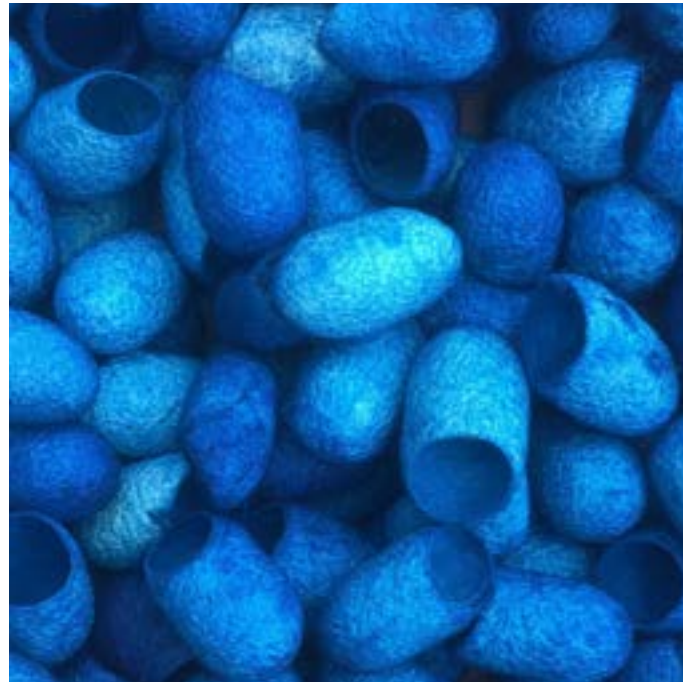
<https://dsource.in/resource/silk-cocoon-handicrafts/properties-cocoon>



Color Red.



Color Violet.



Color Blue.



Color Green.

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P

IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/products>

Products

There are a variety of artefacts produced using Cocoon shells as a raw material. There are many pockets in the Indian southern region, where groups make varieties of Cocoon garlands in high demand. In the pockets of northern and northeast regions, jewelry and accessory design with cocoons are in Practice.

Few practitioners have explored this humble material into uniquely made high-value artefacts. The design diversification by these practitioners created the scope for self-employment. Occasionally the training and workshops arranged by various state and central Skill Development organizations collaborate with these designers. The main objective of Uplift the women entrepreneur aspirants, SHG's and majorly Tribal communities.

Product range as follows:

1. Garlands
2. Wedding florals
3. Souvenirs
4. Boutonniere
5. Flower Bouquet
6. Corporate gifting
7. Fashion Accessories
8. Miniature Handicrafts
9. Textile Embellishments

Conclusion:

The quality of this natural material is mostly unexplored to its full potential. It offers many scopes for exploring further as an excellent alternative to plastics and paper. Due to its biological availability, this craft practice has an enormous opportunity as a micro and small-scale industry.

1. Introduction

2. Tools and Raw Materials

3. Making Process

4. Properties of Cocoon

5. Products

6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P

IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/products>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Garlands.



Garlands.



Garlands.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P

IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/products>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Accessories (Earrings).



Wedding Florals.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

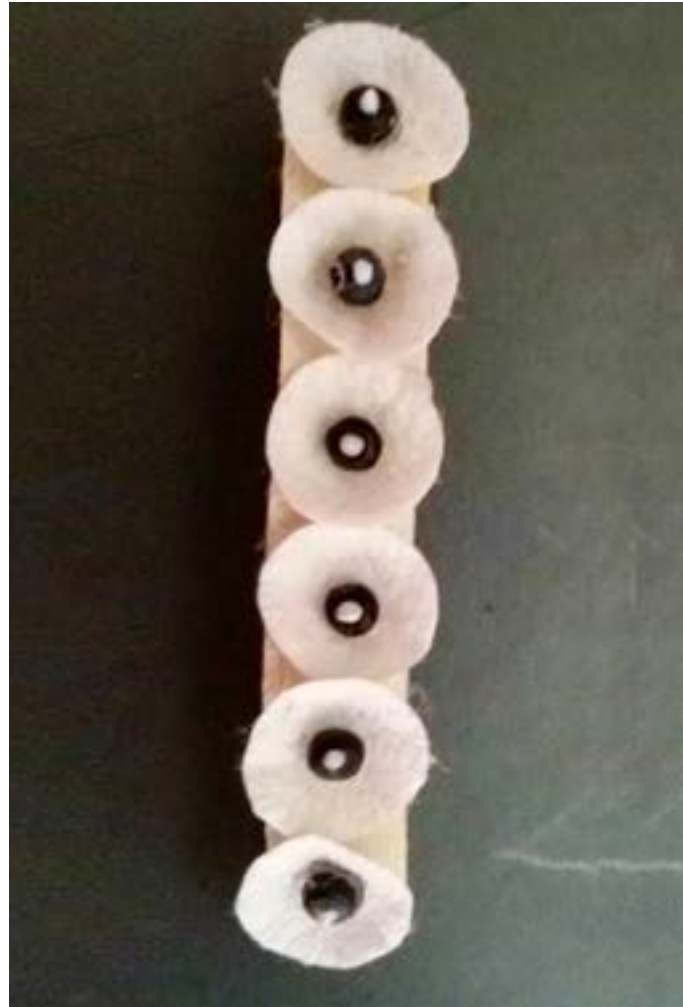
by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/products>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Hair Accessories.



Hair Accessories.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/products>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Boutonniere.



Table Top Decor.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/products>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Greeting Card.



Corporate Gifting.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

<https://dsource.in/resource/silk-cocoon-handicrafts/products>

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details



Water Color Paintings with Cocoons.



Textile Surface Embellishments.

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P
IDC, IIT Bombay

Source:

[https://dsource.in/resource/silk-cocoon-handicrafts/
contact-details](https://dsource.in/resource/silk-cocoon-handicrafts/contact-details)

Contact Details

This documentation and content were done by Prof Arun Mascarenhas, **IDC, IIT Bombay** and Ms. Suvidha P (MFA, Applied Arts).

You can write to the following address regarding suggestions and clarifications:

Key Contacts:

Mr. Chidambaram and Ms. Kamala Chidambaram (Craft Practitioners)

Salem, Tamil Nadu,
India

Phone: 8508226656, 9364200863

Ms. Sarala (Craft Practitioners)

KSSRDI, Bengaluru, Karnatak, India

Ms. Shrimayaum Gita Devi (Craft Practitioners)

Manipur, India

Prof. Vijayendra (Academician and Bio-Craft Enthusiast)

Chintamani, Karnataka, India

Phone: 9448750892

Ms. Suvidha P (MFA, Applied Arts) Designer and Practitioner (Cocoon Products)

Bengaluru, Karnataka, India

Phone: 9740060600

Email: suvidha259@gmail.com

1. Introduction

2. Tools and Raw Materials

3. Making Process

4. Properties of Cocoon

5. Products

6. Contact Details

Design Resource

Silk Cocoon Handicrafts

Best out of silk waste

by

Prof. Arun Mascarenhas and Ms. Suvidha P

IDC, IIT Bombay

Helpdesk Details:

Co-ordinator

Project e-kalpa

Industrial Design Centre

IIT Bombay

Powai

Mumbai 4000 076

India

Phone: 091-22-2159 6805/ 7802

Email: [dsource.in\[at\]gmail.com](mailto:dsource.in[at]gmail.com)

Source:

[https://dsource.in/resource/silk-cocoon-handicrafts/
contact-details](https://dsource.in/resource/silk-cocoon-handicrafts/contact-details)

1. Introduction
2. Tools and Raw Materials
3. Making Process
4. Properties of Cocoon
5. Products
6. Contact Details