Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/introduction

1. Introduction

- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Introduction

Channapatna, which is situated at about 80 km from Bangalore is famous for producing beautiful, bright colored wood turned toys. Channapatna is also referred to as Gombegala Ooru, which means Toy Town. The artisans preferably use ivory wood but occasionally they use rosewood and sandalwood to make the toys and then lacquer them. The craft of toy making originated long back in the town of Channapatna by thethen ruler Tipu Sultan. The Sultan encouraged and patronized toy-making artisans during his rule. He invited toy makers from Persia to teach the local artisans in this craft and since then the craft of toy making is being practiced in Channapatna. Artisans make beautiful turned wood toys and then apply lacquer of bright and vibrant color on it that enhances the beauty of these toys. During this study a local manufacturer of wooden toys was consulted and studied in order to know the current practices and market scenario for the Channapatna toys.



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr.

C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ introduction

1. Introduction

- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/people-and-place

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

People and Place













Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ people-and-place

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/raw-materials

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Raw Materials

One of the most basic and essential raw materials used in making Channapatna toys is wood. The artisan requires a special kind of wood to make these toys. The wood used in this craft should be light in weight, closely grained and easy to work with. A particular kind of tree called Alamara, which is naturally found in abundance in this geographical area, is used for making toys. The wood from this tree is suitable for toy making as it is easy to cut, process and finish. Apart from wood the artisan also use lacquer of different colors to paint the toys.









Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ raw-materials

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details





Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/tools-and-machines

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Tools and Machines

Files and Chisel: Artisans use a lot of tools to shape the wood in other to develop a product. Different shapes and size of files and chisel are used by the craftsperson. Verner caliper, hammers, and divider are also used in the context of toy making.

Lathe Machine: At conventional level artisans use hand lathes to make the toys but on bigger scale production mechanized lathes are used. In work-sheds, a single motor is used to run the 8 small lathe machine. These motors run on electricity and have conveyer belt connected to one end, which runs the other small lathe machines. These machines are customized by the craftsmen and can be dismantled and assembledanywhere. To stop the lathe the belt is manually removed from the main line and the lathe gets switched off, without affecting the other lathes.



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr.

C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ tools-and-machines

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details









Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr.

C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ tools-and-machines

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details





Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/work-enviornment

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Work Enviornment

The artisans involved in making lacquer products work either at home or in work sheds with at least 40-50 people (factory environment) working together. The work sheds provides the artisans with all basic facilities. They are equipped with proper machine, tools, and raw materials and also have decent lighting and ventilation to support the work environment. In the current study a modern factory environment has been studied and analysed.









Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ work-enviornment

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ colour-making-process

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- **6. Colour Making Process**
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Colour Making Process

Process of making colors:

- The artisans first prepare vegetable dyes, which are dried naturally.
- After drying it hardens a little and then it is made into colored sticks.
- The colors are then added to hot lacguer and mixed properly so that the colors blend uniformly with the lacquer.
- Once the colors are mixed theseare then made into sticks and dried.



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- **6. Colour Making Process**
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details







Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/toy-making-process

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Toy Making Process

- The process of making a toy starts from the procurement of raw material, which is sourced from the local wood suppliers and then it is seasoned for 1-3 months depending on the size of the planks. Though the government supplier supply seasoned wood but to achieve cost effectiveness the artisans prefer to buy the wood locally and season them at home itself.
- The seasoned wood is cut in different sizes according to the need. These small pieces are mounted on lathe machine and with the help of different types of chisel the wood is shaped in spherical, circular or oval sahpesas per the design.
- The form is then rubbed with a sand paper in order to smoothen the surface.
- Once the wood is shaped in desired form the lacquering process starts. The artisans press the lacquer stick against the wooden piece while it is still on lathe and due to the heat produced by friction lacquer gets applied on the wood.
- The applied lacquer is spread uniformly over the surface with the help of dried palm leaf. This also gives shine and luster to the product.
- For measuring the size and maintaining the precision, artisans frequently use Varner caliper and divider.
- Once the product is made it is detached from the lathe and further surface embellishment or assembling of different parts (if the toy is made of 2 or more parts) is done. Other decorative works on the surface of toy are also done at this stage.





Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

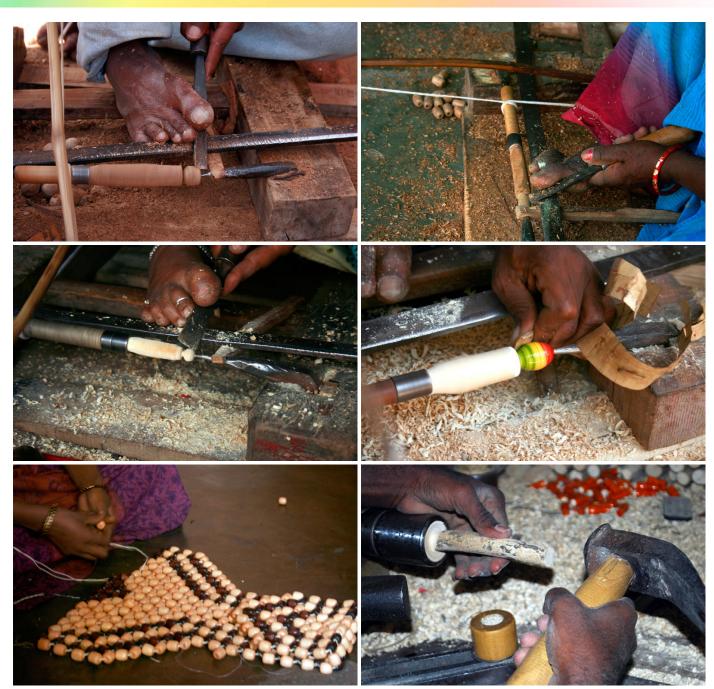
by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

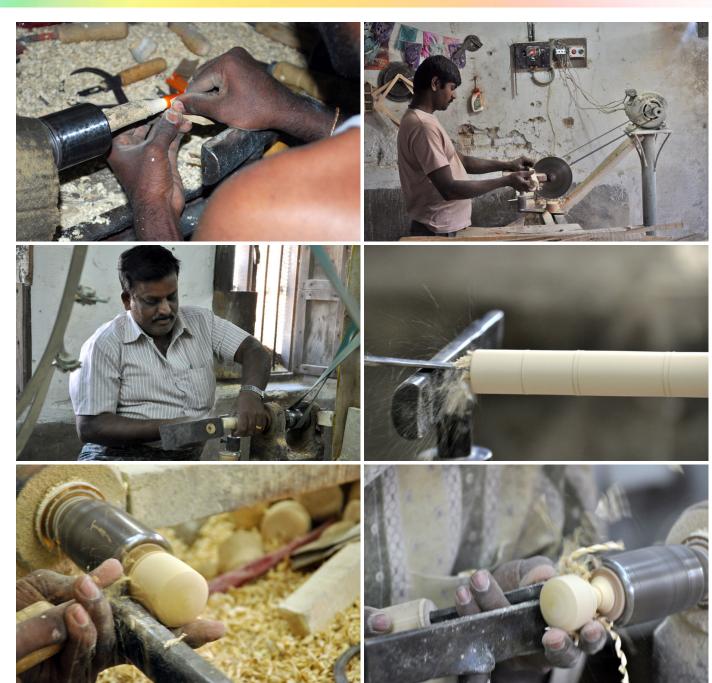
by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details









Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/products

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Products

Product Range:

Toys like dolls, different types of interesting tops, trains, bullock-cart, small vintage cars, bikesand scooters are regularly made in Channapatna. Animals like tortoise, ship etc. Wall hangers, candle stands, jewelry, beads, earnings, key chains etc are frequently made and easily sold in the market. The products developed are also exported to different places. With the change of time and coming of different technologies the artisan's keeps themselves at pace with the current market demands and constantly try to innovate in order to meet the new market. They also make products based on buyers demands.









Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

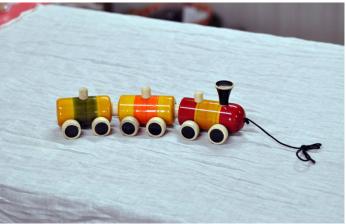


- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details











Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru



- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details













Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details









Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

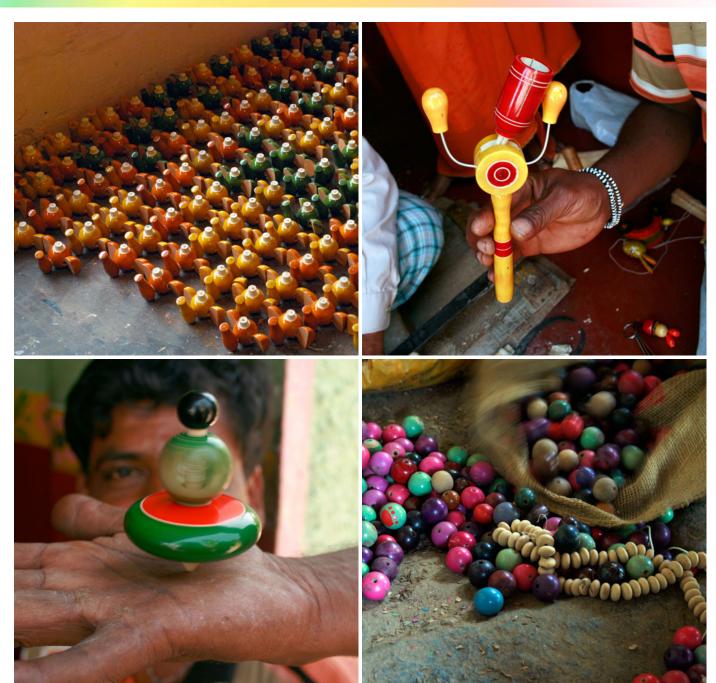
Prof. Bibhudutta Baral, Mr. Antony William and Mr.

C. Susanth

NID, Bengaluru

Source:

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/master-craftsman-story

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Master Craftsman Story

The Story of a Master Craftsman:

Mr. Chandru is the son of Mr. Kenchayya who is a sixty years Master-craftsman of Channapatna, lives in a small village, MuniyaponnaDoddi, situated 80 km south-west of Bangalore. Chandru is also an expert like his father and is the third generation artisan in the craft after his father and grandfather lived successful life as toy makers. They live in the interiors of the village on an acre of land with his large family. Chandru is one of six children of Master Kenchayya and his mother Kabalamma. He studied upto fifth grade after which he pursued craft of toy makinguner the guidance of his father and grandfather. Chandru's grandfather initiated the making of the Channapatna Toys by hand and was the first in the village who trained boys from the village under him, after which they set up their own little workshops. Chandru's father with the help of his friend Nizam started producing toys with the help of lathe machines and approached the Cauvery Arts Emporium on M.G road in Bangalore city to buy his toys. This is how large scale production of toys started and is continuing to date.

Chandru's brothers work in various industries such as furniture, IT sector and the police force in Bangalore city, and her has a married sister. Chandru also has a daughter, who is married and has a son, Shrinivasa Balaji from whom Chandru derives inspiration to make toys for his learning and play. Chandru's son pursues an Information Technology Engineering degree from Bangalore College. A small temple constructed by him and his father under a massive Banyan tree forms a part of his backyard, where his mother performs 'poojas' for the God Muneeshwaranda (Lord Hanuman) every morning at 10:00 a.m, for which people from the village duly attend the ceremony. His family god is Lord Balaji whose temple is in the centre of the village where major rituals and ceremonies are conducted. His uncle owns the land next to his and beyond that the village houses a Muslim Zilla.

Tools and Raw materials: The wood used for toy making is called 'Aalai wood' and is regarded useless for any other purpose except for the making of toys. Every Monday, a lorry carrying one ton of wood, costing Rs.3000 is brought to Chandru's workshop. The waste wood dust and particles are packed into sacks of 100 kg each and sold for Rs.200 for religious fires in ceremonies. Simultaneously five kilograms of lacquer is consumed in a month's time and is bought from the city by the craftsman himself at Rs.840 a kilogram.

Colour Making: Vegetable powder of various colours mainly yellow, blue, green, red and orange (derived from household powders such as turmeric for yellow)(approx.2 tablespoons) are mixed with one kilogram of lacquer to generate the colour to be applied for the toys. The solution is mixed with the help of long wooden sticks and is heated on a high flame for around 18 minutes.

Work Environment: The master Craftsman owns a small workshop that forms a vital part of his home surrounded by a spread of coconut trees. In his backyard, he stores stock of wood and leaves them to dry naturally for a month to drain the milk like sap before it can be used for toy making. Chandru sits in his workshop from morning

Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/master-craftsman-story

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

to twilight and performs all the finishing tasks like hand painting the toys after it has been lacquered along with his father and generates new ideas and concepts. There are four workers working in his workshop who are from the same village. They work from 8:00 AM to 5:00 PM for six days a week.

The craftsmen are paid differently for the different kinds of parts they make. Chandru claims there are no health issues regarding the making of the toys as the wood dust does not affect the lungs. He does not wear protective gear as he believes it hampers the production process. He has deep gashes and bruises all over his hands due to hazards associated with the lathe machines. Chandru's workshop supplies products to Cauvery Arts Emporium, situated on M.G in Bangalore. Total revenue generated from the supply is Rs.30,000. He sells around 2000 pieces in a month to the Cauvery emporium. Chandru sends samples to the emporium after which, the Emporium chooses which products to sell and sends him images and number of pieces to be supplied for the month. After getting the order Chandru coordinates his works in his workshop to produce the required amount of toys for the emporium. Chandru has no parallel business although he had land in his backyard to cultivate crops. He leads a content life with his craft business. Some of the products such as the whistles, rattles, wobble toys are the latest innovations and Chandru is proud to have been the first to introduce these in the extensively competitive market. Once a while the craftsmen of the village attend exhibitions in Bangalore, Delhi, Mumbai and Chennai and display their toys along with their latest innovations.





Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/ master-craftsman-story

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Resource

Channapatna Toy II

The Craft of Wooden Toys

by

Prof. Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth

NID, Bengaluru

Source:

http://www.dsource.in/resource/channapatna-toy-ii/contact-details

- 1. Introduction
- 2. People and Place
- 3. Raw Materials
- 4. Tools and Machines
- 5. Work Enviornment
- 6. Colour Making Process
- 7. Toy Making Process
- 8. Products
- 9. Master Craftsman Story
- 10. Contact Details

Contact Details

This documentation was done by Professor Bibhudutta Baral, Mr. Antony William and Mr. C. Susanth at NID, Bengaluru.

You can get in touch with Professor Bibhudutta Baral at bibhudutta[at]nid.edu.

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

Helpdesk Details:

Co-ordinator
Project e-kalpa
R & D Campus
National Institute of Design
#12 HMT Link Road, Off Tumkur Road
Bengaluru 560 022
India.

Phone: +91 80 2357 9054 Fax: +91 80 23373086

Email: dsource.in[at]gmail.com