

# 'DOLL MAKING CRAFT'

Design Development & Skill Upgradation



Sponsored by:

North-Eastern Development Finance Corporation (NEDFi), Assam

Conducted by:

National Institute of Design (NID), Ahmedabad

## National Institute of Design (NID)

The National Institute of Design (NID) is internationally acclaimed as one of the foremost multi-disciplinary institutions in the field of design education and research. The business week, USA has listed NID as one of the top 25 European and Asian institutes in the world. The institute functions as an autonomous body under the department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. NID is recognized by the Department of Scientific and Industrial Research (DSIR) under the Ministry of Science & technology, Government of India, as a scientific & industrial design research organization. NID has been a pioneer in industrial design education after Bauhaus and Ulm in Germany and is known for its excellence to make 'design in India, made for the world', a reality. NID Graduates have made a mark in key sectors of commerce, industry and social development by becoming catalysts in the process and through thought leadership.

The education programmes at NID, under each discipline are designed to meet these objectives so that students are able to progress through their courses in an integrated manner.

The curriculum should generate the scope for opportunities to integrate experiential and explorative learning in order to understand and achieve a high degree of creative innovation and quality.

A flexible framework for student-centered learning, whereby courses and assignments are able to harness the potential each student has in terms of creative expression and multi-dimensional learning.

Each programme must provide the opportunity to identify, plan and achieve learning goals through an understanding of cultural, social and technological developments in the context of historical, contemporary and individual concerns.

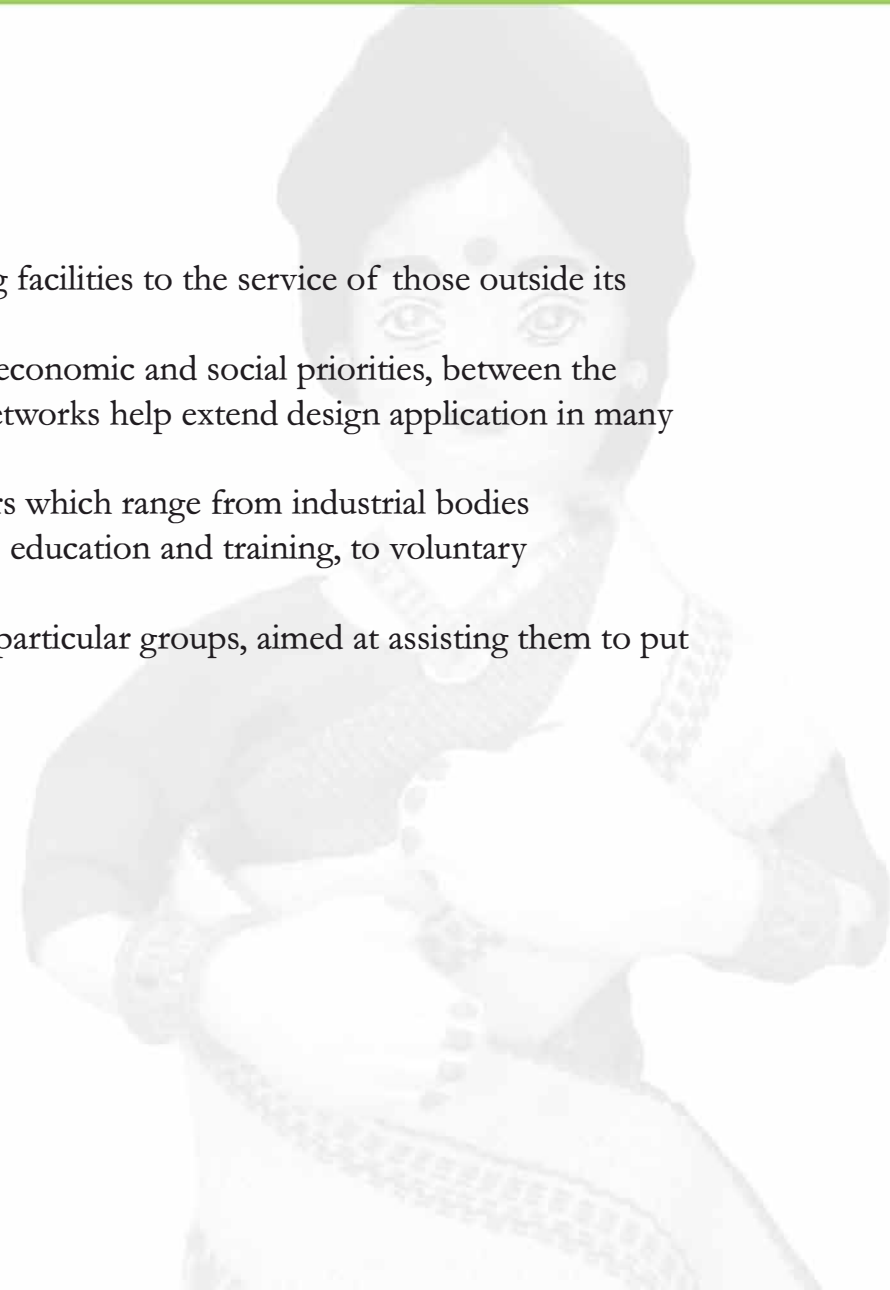
## Outreach Programmes (NID)

NID's Outreach Programmes bring the Institute's experience and training facilities to the service of those outside its regular education and client service activities.

These Programmes help build a network of design collaboration toward economic and social priorities, between the Institute and organisation, groups and individuals all over India. These networks help extend design application in many areas still new to design.

NID's efforts are enriched by the experience of its Outreach collaborators which range from industrial bodies (particularly small, medium and hand industries) and other institutions of education and training, to voluntary organisation and central or state bodies working in priority sectors.

Workshop and training programmes are tailored to the specific needs of particular groups, aimed at assisting them to put design awareness in schools, at primary and secondary levels.



## North Eastern Development Finance Corporation Ltd. (NEDFi)

The North Eastern Development Finance Corporation Ltd. (NEDFi) was incorporated under the Companies Act, 1956, on August 9, 1995 with its registered office at Guwahati, Assam, for the development of industries, infrastructure, animal husbandry, agri-horticulture plantation, medicinal plantation, sericulture plantation, aquaculture, poultry and dairy in the North Eastern states of India.

NEDFi has been promoted by All India Financial Institutions - Industrial Development Bank of India, ICICI Ltd., Industrial Finance Corporation of India, Small Industries Development Bank of India, Insurance Companies - Life Insurance Corporation of India, General Insurance Corporation and its subsidiaries, Investment company - Unit Trust of India and Bank - State Bank of India.

NEDFi is the premier financial and development institution of the North East of India. The main objects to be pursued by NEDFi as per its Memorandum of Association is :

To carry on and transact the business of providing credit and other facilities for promotion, expansion and modernisation of industrial enterprises and infrastructure projects in the North Eastern Region of India, also carry on and transact business of providing credit and other facilities for promotion of agri-horticulture plantation, medicinal plantation, sericulture plantation, aquaculture, poultry, dairy and animal husbandry development in order to initiate large involvement of rural population in the economic upsurge of the society and faster economic growth of different parts of the North Eastern region.

NEDFi with its Products and Services aims to be a dynamic and responsive organization catalyzing the economic development of the Northeast of India.

NEDFi has its head office based in Guwahati, Assam.

It has sponsored one such project before in Agartala for Doll making under the guidance of Mrs. Shukla Chakraborty. This is NEDFi's second initiative for this craft & this time in collaboration with NID.

## Tarun Sangha (Agartala)

With a motive to do something for the good of the society, 'Tarun Sangha' was established by the youth of Ramnagar 1,2,3 (Agartala, Tripura) on the 5th of Feb 1971 in an open space at Ramnagar 3. They initiated their services the very next month with during the struggle for freedom of the Bengalees from the Pakistani rulers, by helping the refugees with food and clothing.

The sangha got registered in the year 2000 under the cooperative society act of 1980.

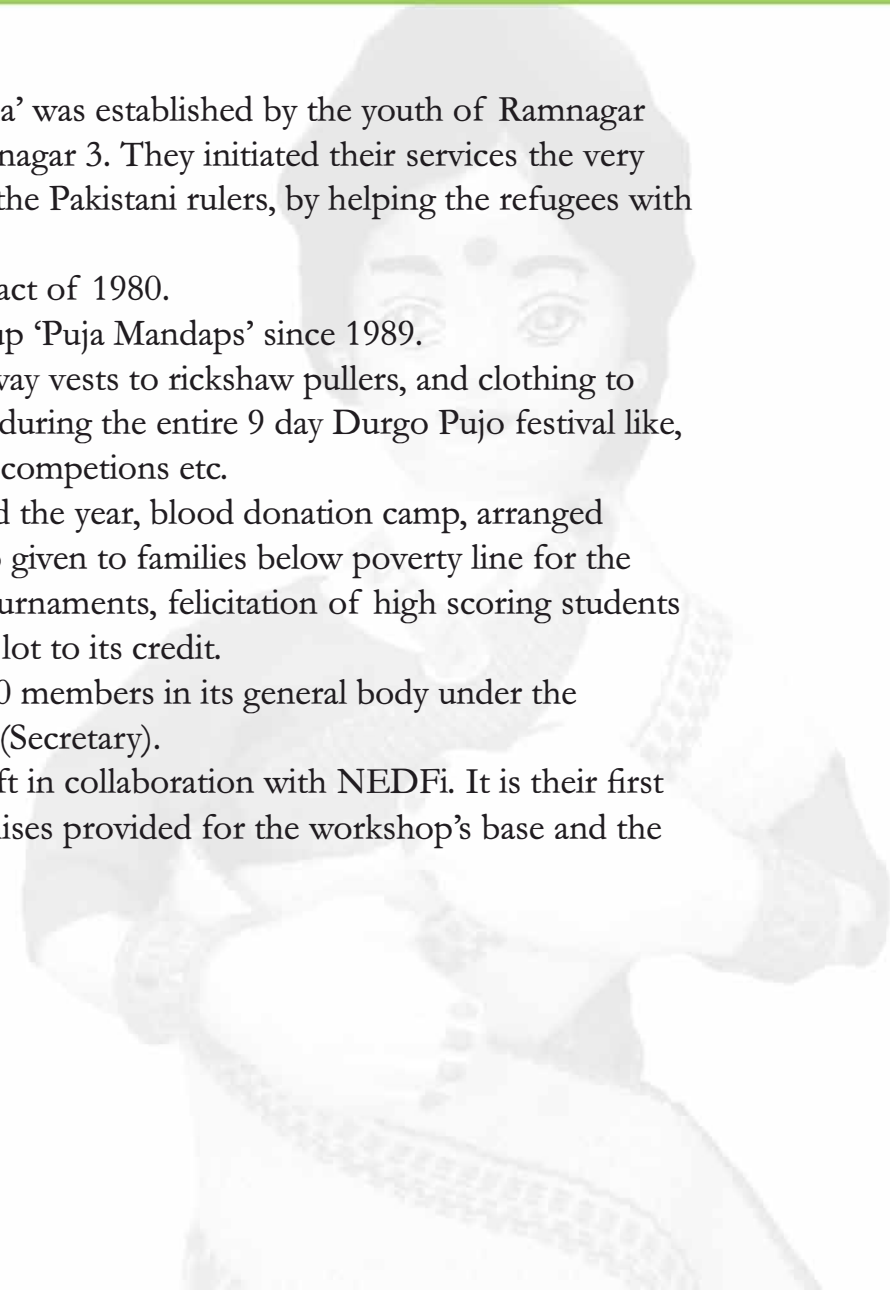
Tarun Sangha actively participates in 'Durgo Pujo' and has been putting up 'Puja Mandaps' since 1989.

They take up various donation and services during the pujo, like giving away vests to rickshaw pullers, and clothing to families below poverty line. They also conduct various cultural programs during the entire 9 day Durgo Pujo festival like, kantha stitching competitions, rangoli competitions, shlok recitations, art competitions etc.

Apart from Durgo Pujo, they also organise various social activities around the year, blood donation camp, arranged marriage registration camp, hepatitis vaccination programme. Help is also given to families below poverty line for the wedding of their daughters. From planting trees to organizing football tournaments, felicitation of high scoring students to paying a tribute to the great Rabindranath Tagore, Tarun Sangha has a lot to its credit.

The organisation is currently has 17 members in its executive body and 60 members in its general body under the leadership of Mr. Subrata Majumder (President) and Mr. Deepen Ghosh (Secretary).

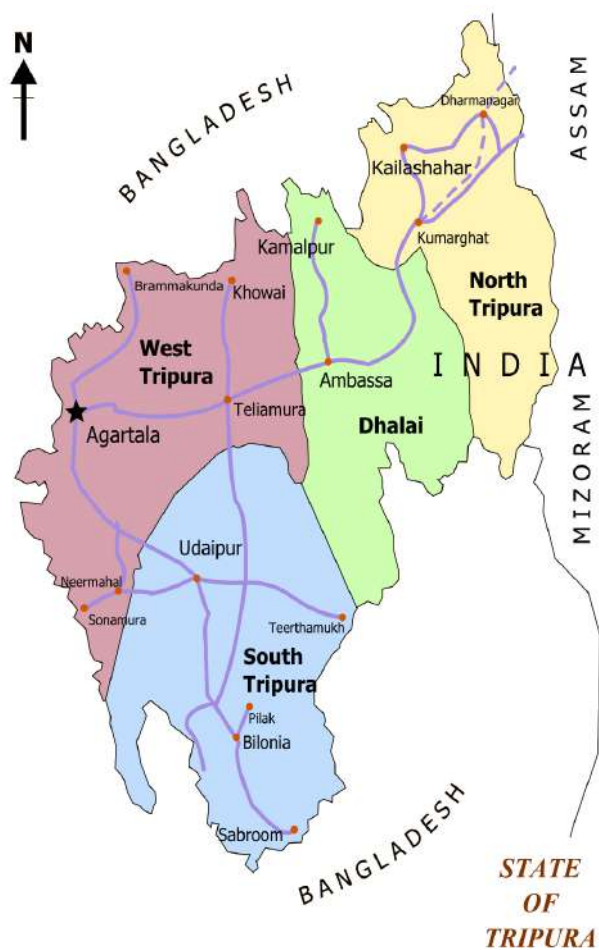
Tarun Sangha has provided for an undying support in promoting this craft in collaboration with NEDFi. It is their first initiative in this direction as a local club for social causes. The club's premises provided for the workshop's base and the members cooperated at every nook of the work.





Tarun Sangha Club, location for the workshop at Ramnagar 3, Agartala

## Location



Tripura is a state in North East India. The third-smallest state in the country, it covers 10,491 km<sup>2</sup> (4,051 sq mi) and is bordered by Bangladesh to the north, south, and west; the Indian states of Assam and Mizoram lie to its east. Five mountain ranges run north to south, with intervening valleys, while to the west Agartala, the capital, is located on a plain. The state has a tropical savanna climate, with seasonal heavy rains from the south west monsoon. Forests cover more than half of the area, in which Bamboo and cane forests are common. Tripura has the highest number of primate species found in any Indian state.

Indigenous communities, known in India as Scheduled tribes, constitute about 30 per cent of the population. The Kokborok-speaking Tripuri people form the major group among 19 tribes and many other subtribes; Bengali people form the ethno-linguistic majority. Mainstream Indian cultural elements, especially from Bengali culture, coexist with traditional practices of the ethnic groups, such as various dances to celebrate religious occasions, weddings and festivities; the worship of regional deities; and the use of locally-crafted musical instruments.

Agartala is the largest city and the capital of the state.

Ramnagar is located at the north-western part of the town Agartala, the capital of Tripura.

Ramnagar has many divisions in it. As much as 12 divisions are in Ramnagar. They are named as Ramnagar No.1, Ramnagar No.2, etc.



Mrs. Shukla Chakraborty, the master at work



## Doll Making

Doll making is an emerging interest for many women in Tripura with an increasing number of girls & housewives evincing keen interest in doll-making as a lucrative profession, courtsey **Mrs. Shukla Chakraborty** of Agartala, who is the creator of such kind of dolls, master craftsperson & trainer as well.

Shukla, who was just a housewife till a few years back, is now a famed entrepreneur in cloth dolls in Tripura. Without any formal training, she accidentally discovered her talent trying to finish her daughter's school project, which got her praises and encouraged her to take this forward. She displayed her first set of dolls in an Industrial fair and made good sales, ever since there is no looking back.

She received an invitation from the North Eastern Development Finance Corporation Ltd. (NEDFi) to participate in fairs held out of the state.

Unlike most other cloth dolls made elsewhere in India, the most striking feature of Shukla's dolls remains the faces which are made realistic. She makes the face for the dolls out of a deco-fix, a mixture readily available in the market used for fixing screws in walls. Instead of sewing cloth and stuffing with cotton, the bodies of the dolls are made by wrapping strip of cloth around an iron wire frame. The limbs, fingers and the torso of the dolls are also made of cloth. The fingers are then fixed to the limbs and arms with glue.

The accuracy in gestures of the hand and body is provided because of the accurate cloth patterns used for the body of the dolls and the special way the wire frame is assembled. She then fixes appropriate clothing and jewellery to the doll. Her dolls depict different tribes, art and culture of northeast India, Indian classical and folk dances, Gods and Goddesses and costumes from India as well as other nations. The cloth dolls are in high demand not only in the state but also outside. Last year, she participated at the International Trade Fair (ITF) in New Delhi, where the sale was very good. Now she is not alone as many more have joined her. She has been training women groups for various NGO under the sponsorship of NEDFi for quite some time now.

Her dolls sell anywhere between Rs. 100 to Rs 120. Special dolls like idols of Radha-Krishna are sold between Rs 300-350. Nedfi recently concluded their very first workshop on doll making in Agartala (7nov-19dec 2012), in association with 'Tarun Sangha' an NGO from Ramnagar 3 Agartala, Tripura. Shukla Chakraborty trained a group of 25 women here, 20 days for doll making and 10 for dry flower making. The dolls have a huge scope of business provided that their finishing & marketing are managed.

## Project Introduction

### Objective

Design Development & Skill Upgradation Workshop on Doll Making Craft is proposed to seek better livelihood opportunities for the women in Agartala, Tripura through design intervention in the Doll Making Craft, since doll making is emerging as a major fascination for many women who are keenly interested in taking it up as a lucrative profession. Additionally the objective is also to analyze the potential of doll making as a craft, so that it can be developed in a cluster.

### Scope

- \* Product refinement to be done by working on the different aspects of the existing dolls i.e sizing & scaling, finishing, exploring different materials & processes, techniques etc.
- \* Product development to be done by exploring new forms & figures, thereby introducing them to the women artisans through modules.
- \*Product diversification to be done by developing a range of utility products suitable for the contemporary markets.

### Proposed Methodology

The training will focus on refining & fine tuning of the existing skills of the artisans to the design needs, understanding integration of functionality with aesthetic aspects in developing products, sensitizing various quality parameters for finish.

products & exploring the scope for value addition on the existing processing techniques.

The main approach for this workshop will be learning through hands-on experience through demonstrations, experiences & discussions. The workshop will be conducted by a team comprising of an NID faculty member, 2 design associates.

## **Team**

Sonal Chauhan : Project Head ( Faculty, Apparel Design & Merchandising, NID)

Parag Sarma : Senior Lead Designer ( Industrial Designer, Toy & Game Design)

Avani Patel : Designer (Textile & Apparel Designer)

## **No. of Artisans**

A maximum number of 25 women is expected to attend the workshop, who work in this sector. The identification of these people is NEDFi's responsibility.

## **Deliverables**

It is estimated that 10 human figures, 10 non-human/animal figures and 10 utility products will be realized as a culmination of this workshop. The workshop will be documented and submitted to the client in the form of a report as a final deliverable.

## Need Assessment

A 'Need Assessment workshop' was conducted on 31st Jan-1st Feb 2013, where 18 participants demonstrated their skills by making a doll each using their standard method, which gave the NID team to understanding of the technique and basic skill level of the participants.

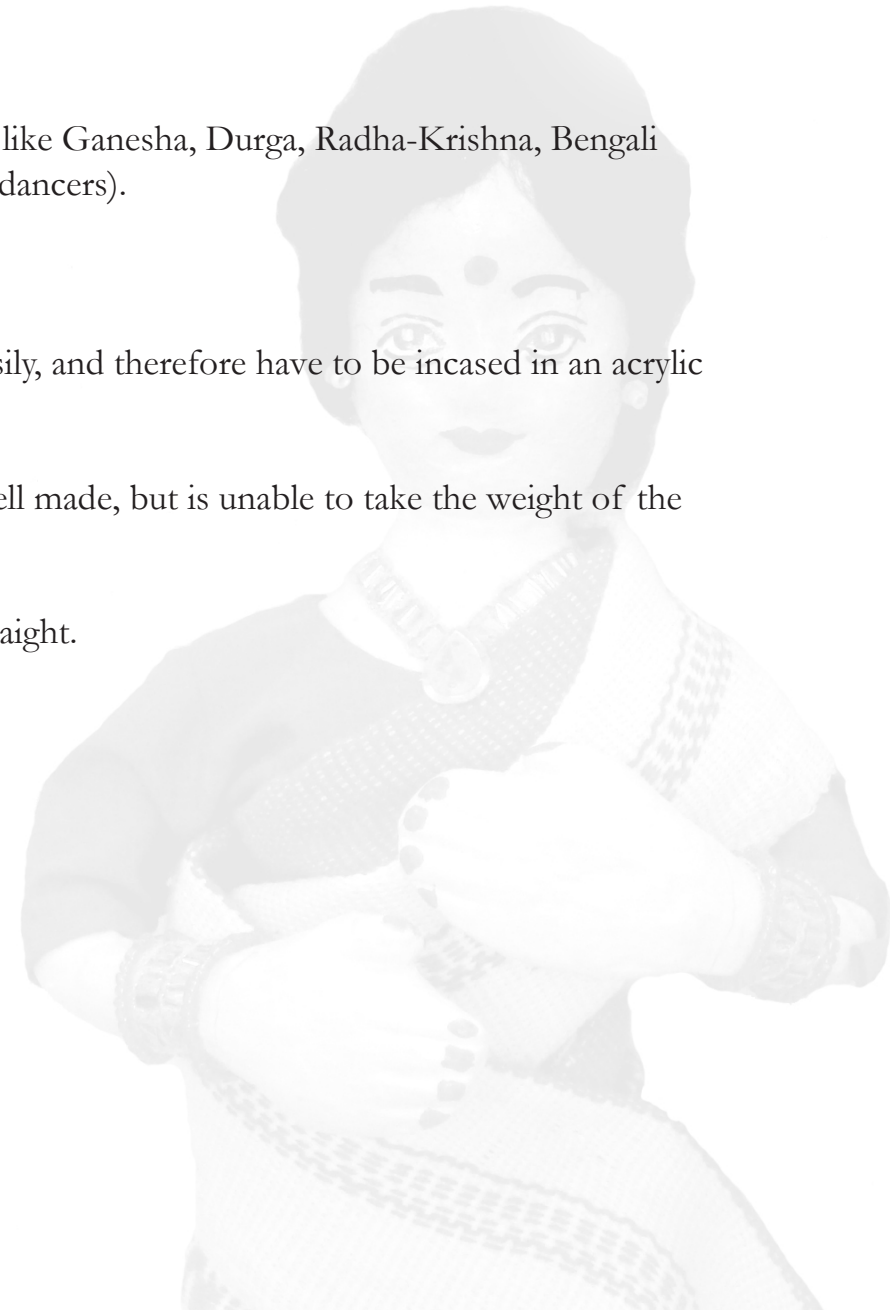
All the participants hailed from middle class families, looking to make additional income by marketing their dolls. Most of the participants were between the age group of 22-40 yrs.



Need Assessment Workshop held by NID

## Observations

- The popular spread of figures include tribals of Northeast India, deities like Ganesha, Durga, Radha-Krishna, Bengali bride (very popular), all ranging between Rs 30- Rs 3000 (a set of 6 Bihu dancers).
- Limited sizes currently available 6” apx.
- Since the dolls are made of cloth, they are unbreakable but get soiled easily, and therefore have to be incased in an acrylic casing and balanced on a wooden stand.
- The basic wire structure of the dolls on which the cloth is wrapped is well made, but is unable to take the weight of the clay head, hence making a wooden base mandatory.
- Limited poses, no specific movements or depictions, mostly standing straight.
- Finishing is rough needs working.
- Lack of imagination, mostly copy each other then using their own ideas.
- Mostly housewives, unemployed.
- Facial features and limbs need attention.



## Suggestions

- The work hours should be decided in-keeping the commitments of the women in their homes, from 12pm - 4pm everyday without any holiday. •Incorporating various postures and stances like sitting, dancing etc.
- Women should be encouraged to use their own imagination instead of just following instructions.
- Using alternative methods to create head and limbs and also grading them in various sizes.
- Polishing and creating distinction in facial features of the dolls.
- Creating balance in the doll without the use of the wooden base.
- Also introduction of other forms apart from human, like animals etc. using the same material and skill set to add to the limited product change.
- Increasing the product variety by introducing table top accessories, key rings, fridge magnets, car hangings etc. and other utility items.
- Dies made using effective and easily available material for faces and limbs is suggested. Hands and feet can also be explored using the same techniques. Dies will reduce labour and also add more refinement and uniformity to the structure, thus improvising the overall product quality.
- The poses of the dolls also could be explored, as all of them are mostly standing in one pose.
- The sizes of the dolls are limited to 8-10 inches, this also can be varied to create options and also to have various price brackets based on product size.

## SWOT Analysis of the craft

### Strength:

- Raw material is available in sufficient quantity
- Locational advantages
- Availability of financial Institutions like NEDFi in nearby locality at Agartala
- New innovative idea of doll making and utilization of local resources like fabric and deco-fix, a mixture readily available in the market used for fixing screws in walls

### Weakness:

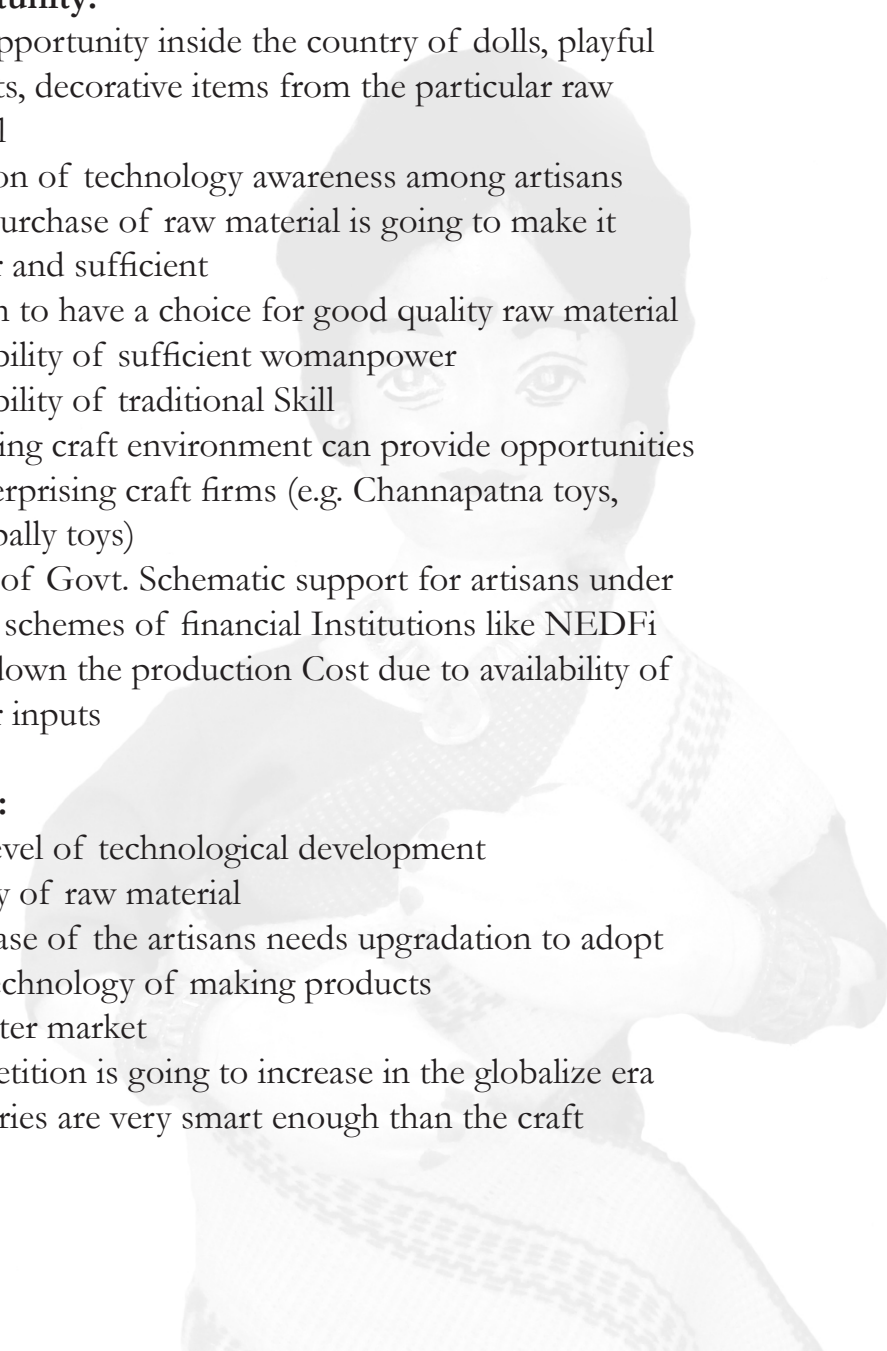
- Limited to local market only
- Lack of marketing skill
- Lack of advanced Technology
- Low productivity (heaviness and low quality of the products)
- Low cost of the products
- High cost of raw material like fabrics and colours
- Lack of awareness and measures for quality assurance
- Uncompetitive in the outside market (detailing and finishing of the products)
- Scale up/down problems of the products

### Opportunity:

- Vast opportunity inside the country of dolls, playful products, decorative items from the particular raw material
- Creation of technology awareness among artisans
- Bulk purchase of raw material is going to make it cheaper and sufficient
- Option to have a choice for good quality raw material
- Availability of sufficient womanpower
- Availability of traditional Skill
- Changing craft environment can provide opportunities for enterprising craft firms (e.g. Channapatna toys, Kondapally toys)
- Scope of Govt. Schematic support for artisans under various schemes of financial Institutions like NEDFi
- Scale down the production Cost due to availability of cheaper inputs

### Threat:

- Low level of technological development
- Quality of raw material
- Skill base of the artisans needs upgradation to adopt latest technology of making products
- No outer market
- Competition is going to increase in the globalize era
- Industries are very smart enough than the craft



# Design Development & Skill Upgradation Workshop on Doll Making Craft

28th March

- Introduction of the team
- Distribution of the workshop kits
- Registration of the trainees

29th - 31st Mar

- Structure for 7" doll
- Face & limb making through dies
- Giving body to the structure with waste cloth
- Applying chalk coat to the body
- Attaching the limbs, face & dressing up the doll
- Facial detailing & touchups

1st - 3rd Apr

- Structure for 14" doll
- Face & limb making through dies
- Giving body to the structure with waste cloth
- Applying chalk coat to the body
- Attaching the limbs, face & dressing up the doll
- Facial detailing & touchups

4th - 6th Apr

- Finishing leftover work
- Making second set of dolls
- Making detofix moulds using dies for utility products

8th - 10th Apr

- Making animal structure with wire
- Giving body to the structure with fabric & paper
- Applying chalk coat on the body
- Final painting and detailing

11th - 13th Apr

- Sandpapering and smoothening of the utility products
- Painting & detailing the products

16th April

- Photoshoot of the products
- Completion of last minute work

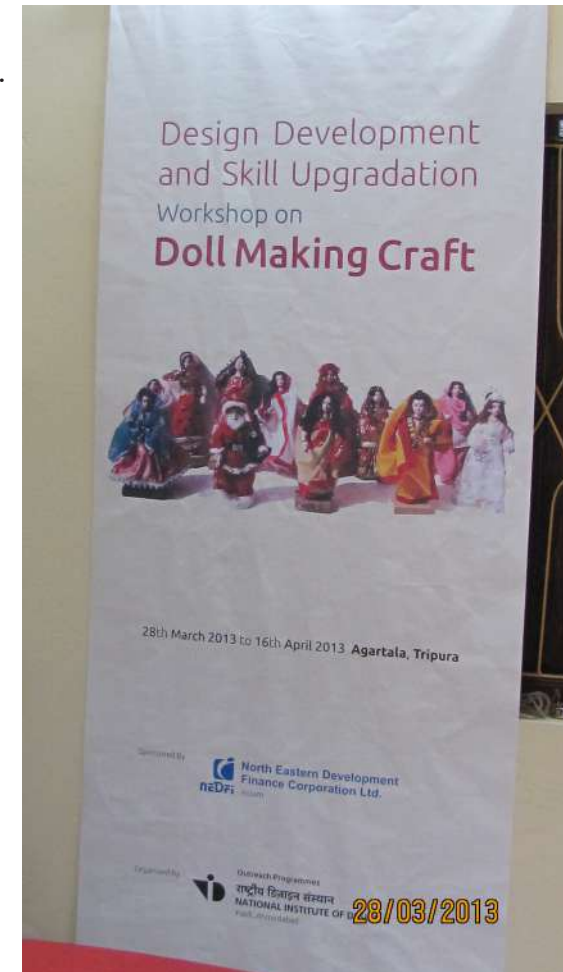


## Workshop

The workshop was inaugurated on the 28th of March 2013, with the putting up of banners, both inside and outside the club premises, by NID & Tarun Sangha.



Banner on the outside of the club by Tarun Sangha



Banner inside the club by NID

The workshop commenced on 28th of March 2013, with an introduction of the team, distribution of name tags and work kits to the participants. Also a brief was given on what the workshop aimed at doing within the 20 days.

Registration



Kit Distribution



Various products were taught to the participants during the workshop, given is list of the things made and the following pages contain the step by step demonstration of all these products being made along with the ready outcome.

•Dolls, realistic human forms:  
size 6”

•Dolls, realistic human forms:  
size 14”

•Animals, simplified/animated

•Utility Products:

- \*Penstand
- \*Incense holder
- \*Paper weight
- \*Stick toys
- \*Fridge magnets
- \*Card holder





The participants of the workshop along with the NID team

## Participants

A total of 22 women actively participated in the 20 day workshop on doll making and skill upgradation held at Agartala. Most of the participants were either house-wives or unemployed spinsters. Very few were graduates, most being educated only till 10th or less.

The focus for these women was to generate an income out of this craft, by improving their skills, adding finish and quality to the products so that they were commercially viable.



- Name: Soma Dhar
- Age: 30 yrs
- Performance: Average
- Education: 10th Pass
- Occupation: Unemployed/unmarried
- No. of earning members: 1 (Self-employed)
- Household income (per month): 7000/month
- No. of toys made: 7
- Enjoyed: Animals
- Problems faced: Big Doll
- Future plans: Practice/Train others/Earn



- Name: Tama Ghosh
- Age: 35 yrs
- Performance: Excellent
- Education: B.A
- Occupation: House wife
- No. of earning members: 1 (Self-employed)
- Household income (per month): 10000/- apx.
- No. of toys made: 8
- Enjoyed: Big doll
- Problems faced: Facial features
- Future plans: Make & sell dolls/toys



- Name: Manisha Datta (Paul)
- Age: 45 yrs
- Performance: Average
- Education: 10th
- Occupation: House wife
- No. of earning members: Part-time(Self-employed)
- Household income (per month): 2-3000/-
- No. of toys made: 8
- Enjoyed: Big doll
- Problems faced: Facial features
- Future plans: Make & sell dolls/toys



- Name: Mira Debnath
- Age: 40 yrs
- Performance: Average
- Education: 10th fail
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 15000/-
- No. of toys made: 9
- Enjoyed: Animals
- Problems faced: Facial features
- Future plans: Practice, make & sell dolls/toys



- Name: Nabnita Mukherjee
- Age: 40 yrs
- Performance: Good
- Education: 9th
- Occupation: Sells dolls from home
- No. of earning members: 2 (Husband & she)
- Household income (per month): 5000/-
- No. of toys made: 14
- Enjoyed: Big doll
- Problems faced: Facial features
- Future plans: Make & sell dolls/toys



- Name: Iti Ghosh
- Age: 44 yrs
- Performance: Average
- Education: 9th
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 10000/-
- No. of toys made: 6
- Enjoyed: Big doll
- Problems faced: Animal structures
- Future plans: Make & sell dolls/toys



- Name: Nabnita Mukherjee
- Age: 36 yrs
- Performance: Good
- Education: B.A Sec yr
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 20000/-
- No. of toys made: 13
- Enjoyed: Animals
- Problems faced: Balancing the Big Doll
- Future plans: Make & sell dolls/toys





- Name: Nilanjana De Patari
- Age: 39 yrs
- Performance: Excellent
- Education: B.A
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 42000/-
- No. of toys made: 7
- Enjoyed: Animals
- Problems faced: Balancing the Big doll
- Future plans: Make & sell dolls/toys



- Name: Rita Rani Sutradhar
- Age: 40 yrs
- Performance: Excellent
- Education: 10th
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 15000/-
- No. of toys made: 9
- Enjoyed: Big doll
- Problems faced: Facial features
- Future plans: Make & sell dolls/toys



- Name: Sanchita Majumdar Banik
- Age: 32 yrs
- Performance: Average
- Education: BSc Honors Botany
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 35000/-
- No. of toys made: 7
- Enjoyed: Animals
- Problems faced: Moulding & features
- Future plans: Make & sell



- Name: Piyankee Raychoudhury
- Age: 29 yrs
- Performance: Average
- Education: B.A
- Occupation: Runs handicraft school , teaches stuffed toys, tie n dye etc.
- No. of earning members: 2 (She & Mother)
- Household income (per month): 25000/-
- No. of toys made: 7
- Enjoyed: Small doll
- Problems faced: Balancing the Big Doll
- Future plans: Train others



- Name: Arpita Bhattacharjee
- Age: 30 yrs
- Performance: Average
- Education: M.A Sanskrit
- Occupation: Unemployed, appeared for teaching exam
- No. of earning members: 2(Father & Mother)
- Household income (per month): 16000/-combined pension of both the parents
- No. of toys made: 7
- Enjoyed: Dolls
- Problems faced: Structure animals
- Future plans: Make & sell in fairs etc.



- Name: Jaya Sutradhar
- Age: 30 yrs
- Performance: Average
- Education: 6th
- Occupation: Unemployed/unmarried
- No. of earning members: 1 (Brother)
- Household income (per month): 10000/-
- No. of toys made: 7
- Enjoyed: Big doll
- Problems faced: None
- Future plans: Make show pieces for home & friends



- Name: Ratna Das (Paul)
- Age: 46 yrs
- Performance: Bad
- Education: 10th
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 10000/-
- No. of toys made: 7
- Enjoyed: Animals
- Problems faced: Fish
- Future plans: Make & sell



- Name: Sabitri Karmakar
- Age: 40 yrs
- Performance: Bad
- Education: 10th fail
- Occupation: House wife
- No. of earning members: 2 (She & Husband)
- Household income (per month): 2000/- apx
- No. of toys made: 6
- Enjoyed: All
- Problems faced: None
- Future plans: Nil



- Name: Kakoli Debnath
- Age: 25 yrs
- Performance: Good
- Education: Pursuing M.A
- Occupation: Student
- No. of earning members: None
- Household income (per month): 5000/-apx  
(Pension, Father)
- No. of toys made: 7
- Enjoyed: Dolls
- Problems faced: Sand-papering the die made pieces
- Future plans: Make & sell



- Name: Tinku Das
- Age: 28 yrs
- Performance: Good
- Education: 10th fail
- Occupation: Part time tailoring
- No. of earning members: 2 (She & Husband)
- Household income (per month): 12000/-apx
- No. of toys made: 8
- Enjoyed: Animals
- Problems faced: Doll limbs
- Future plans: Practice & sell



- Name: Jayshree Ghatak
- Age: 41 yrs
- Performance: Average
- Education: B.A
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 30000/-
- No. of toys made: 6
- Enjoyed: Animals
- Problems faced: Structure of the Big Doll
- Future plans: Train & sell



- Name: Ratna Dey
- Age: 26 yrs
- Performance: Average
- Education: 10th fail
- Occupation: Tailoring
- No. of earning members: 3 (She, Father & Brother)
- Household income (per month): 7000/-  
apx
- No. of toys made: 7
- Enjoyed: Dolls
- Problems faced: Animals
- Future plans: Make as per order



- Name: Piyashi Roy
- Age: 29 yrs
- Performance: Excellant
- Education: B.A
- Occupation: Unemployed/unmarried
- No. of earning members: 2 (Mother & Father)
- Household income (per month): 30000/-  
Pension of both the parents
- No. of toys made: 7
- Enjoyed: Animals & dolls
- Problems faced: Attaching the limbs of the dolls
- Future plans: Practice & sell



- Name: Ruma Rajkumari
- Age: 38 yrs
- Performance: Good
- Education: 10th
- Occupation: House wife
- No. of earning members: 1 (Husband)
- Household income (per month): 20000/-
- No. of toys made: 9
- Enjoyed: Animals
- Problems faced: Doll's clothing
- Future plans: Train & take orders



- Deto-Fix (papeir mache based material used for fixing nails into the wall)
- Chalk powder, fevicol & emulsion
- Aluminium wire (2.5mm), bamboo sticks & sand-paper
- Old sari rags & decorative fabric
- Plaster of Paris dies
- Fake hair, trims and laces

## Workshop Kits



- Regzine bag
- Old sari, threads & needles
- Fabric paints, brushes & palette
- Measuring tape, scissors & pliers
- Scale, eraser, sharpner, pencil, pen & notepad
- Fevicol/fabric glue



## Materials

All the basic material required for making the various toys were provided to each participant individually. Wire, chalk powder, fabric and trims were the only common pool of items shared between them.

Distribution of wire



**P.O.P Die making ( these were made before hand to be used during the workshop)**



Making a clay base for P.O.P moulding



Making P.O.P paste



Filling P.O.P paste on the base



The extracted mould/die



Deto-fix face from the die



Die made hands & feet



Utility products made by die



Stick toys & fridge magnets



Deto-fix

## Preparing the 'Deto-fix' mixture for moulding



Mixing fevicol in Deto-fix



Adding chalk-powder to the mixture



The ready dough

## Preparing Chalk powder paste



Chalk Powder



Adding fevicol to the chalk powder



Adding water to the mix

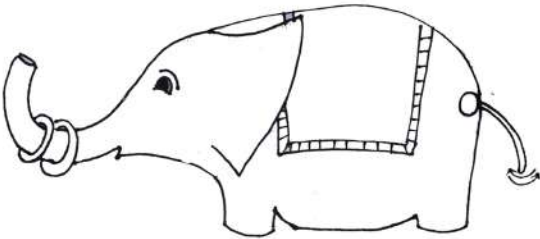


The ready solution used for coating the wrapped structures

Utility Product ideas



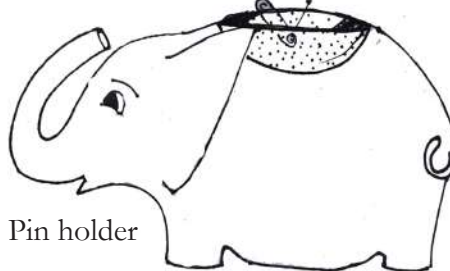
Incense dispenser



Ring holder

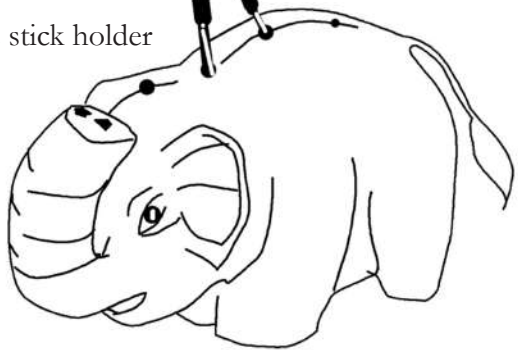


Incense stick holder



Pin holder

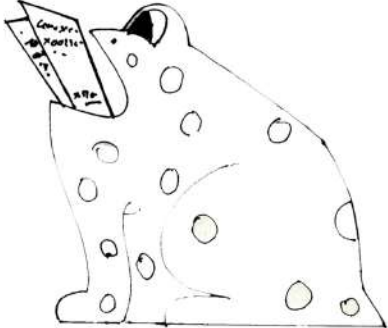
Incense stick holder



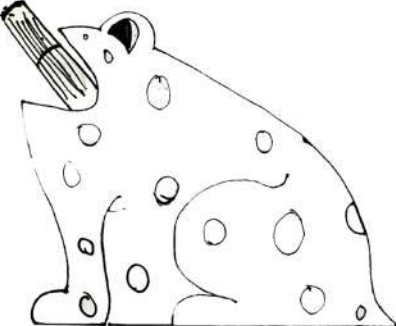
Paper weight

**Ideas generated for utility products made using P.O.P dies**

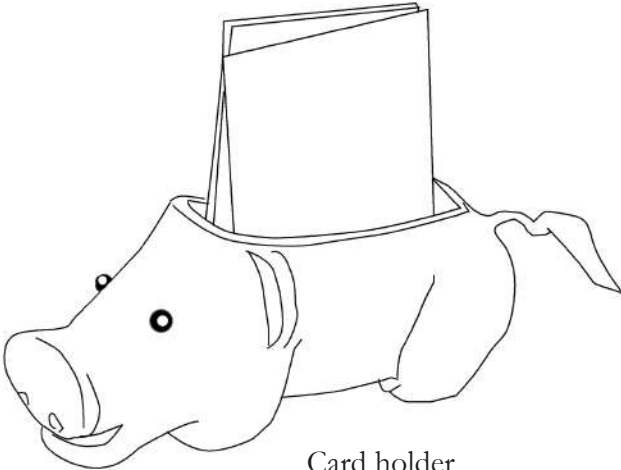
Utility Product ideas



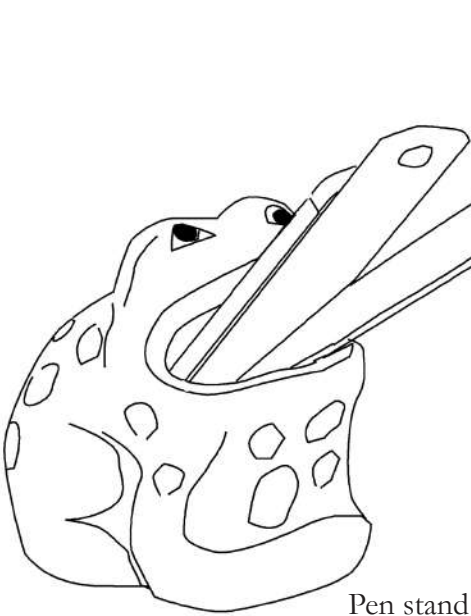
Card holder



Ash tray



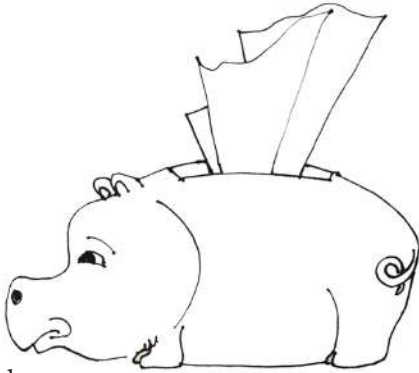
Card holder



Pen stand



Pen stand



Tissue paper holder



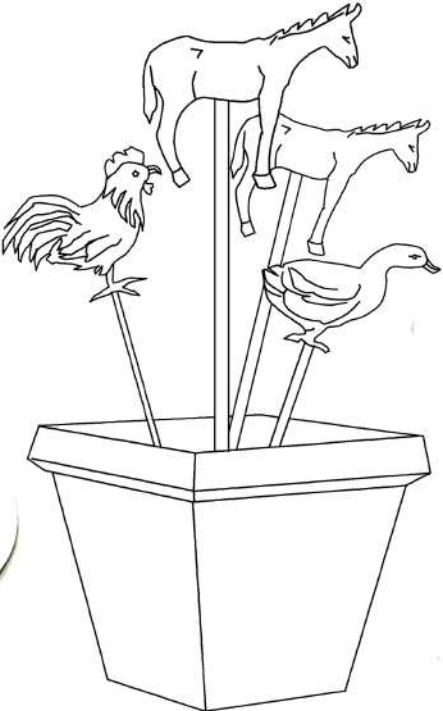
Utility Product ideas



Fridge magnets



Key chains



Stick toys for pots & vases

# Dolls

## Realistic Human Forms

Preparing the wire structure

Wrapping of fabric to it

Moulding deto-fix face, hands, feet from dies

Attaching limbs to body

Finishing the extracted moulds

Balancing the doll on its feet without a stand

Applying chalk paste to the wrapped structure & drying it

Applying emulsion & body paint to the body

Clothing, hair & accessorizing

Painting the facial features



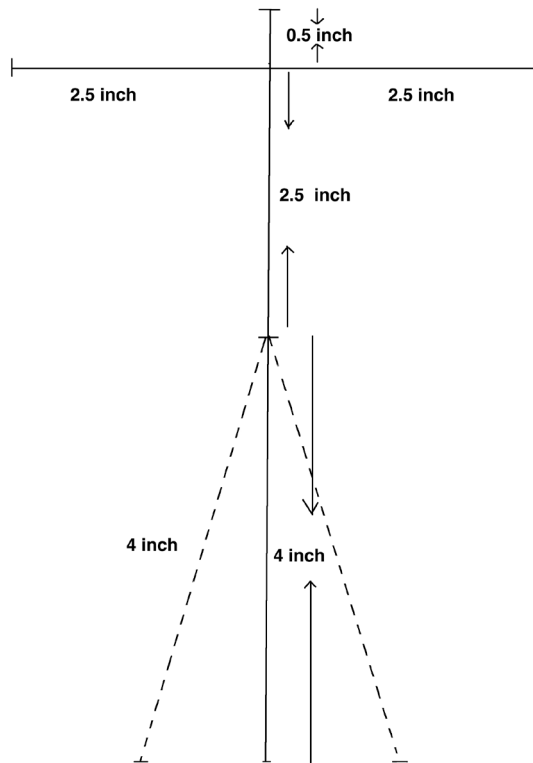
# DOLLS

**(Human Forms)**

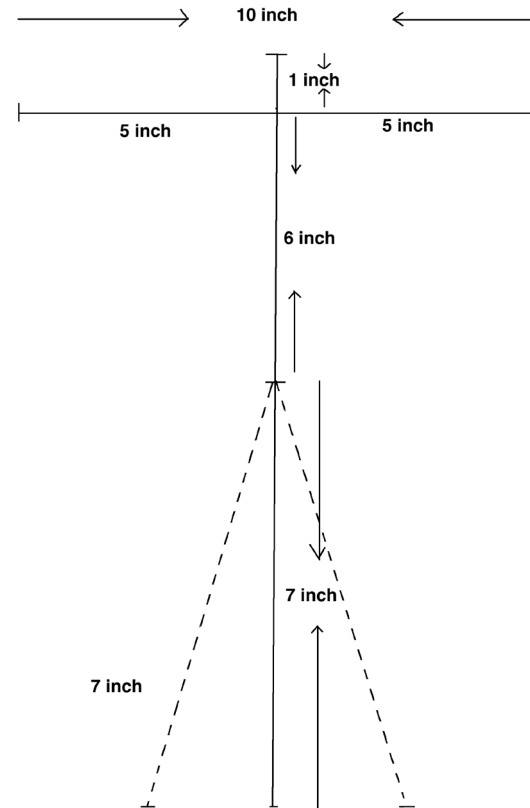
**Process & Outcome**

## Line Drawing to help understand the measurements of the two sizes of Dolls

The Dolls were made in two sizes, 6" & 14". Given are the measurements for both the sizes, followed by their construction method which is the same for both the sizes.



Size 'S' doll: 7inches



Size 'L' doll: 14inches

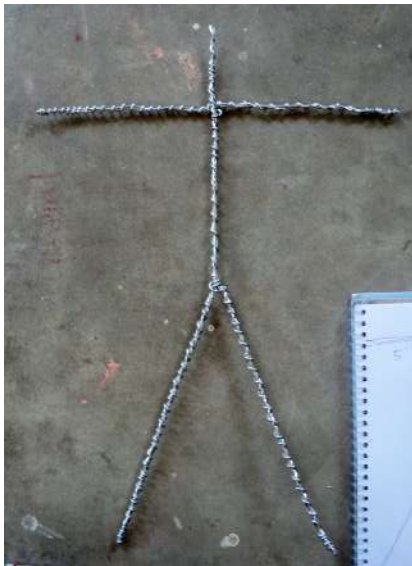
## Doll Structure



Women measuring & making the wire structure for the dolls



Making structures using nose-pliers



Ready wire structure



Wrapping old fabric strips to give body to the structure



The wrapped structure

Chalk paste coatind & moulding head - hands - feet



Applying chalk pase to the fabric wrapped structure



Structures kept to dry



Making head - hands - feet using dies

## Attaching the head - hands - feet & Balancing the dolls



Attaching feet



Attaching head



Women balancing & attaching the limbs to the dolls



Assembled dolls left to dry

Mixing & Application of skin tones on the dolls





Sketching, stitching & dressing up the dolls



Detailing & face painting the dressed dolls



The selected dolls size 'S'



Adi tribe  
(Arunachal  
Pradesh)

Maharashtrian

Tripuri tribal  
Tripura

Sari clad woman

Woman dressed in a Ghagra

The selected dolls size 'S'



Sari clad women

Clown

Bengali groom

Teacher

The selected dolls size 'L'



Bodo tribe  
Assam

Khasi tribe  
Meghalaya

Assamese couple  
Assam

Bodo tribe  
Assam

Tripuri tribe  
Tripura

Adi tribe  
Arunachal  
Pradesh

The selected dolls size 'L'



Bengali Brides

The selected dolls size 'L'



Tribals from North-east India



Assamese couple  
Assam



Sari clad woman



Meitei couple  
Manipur

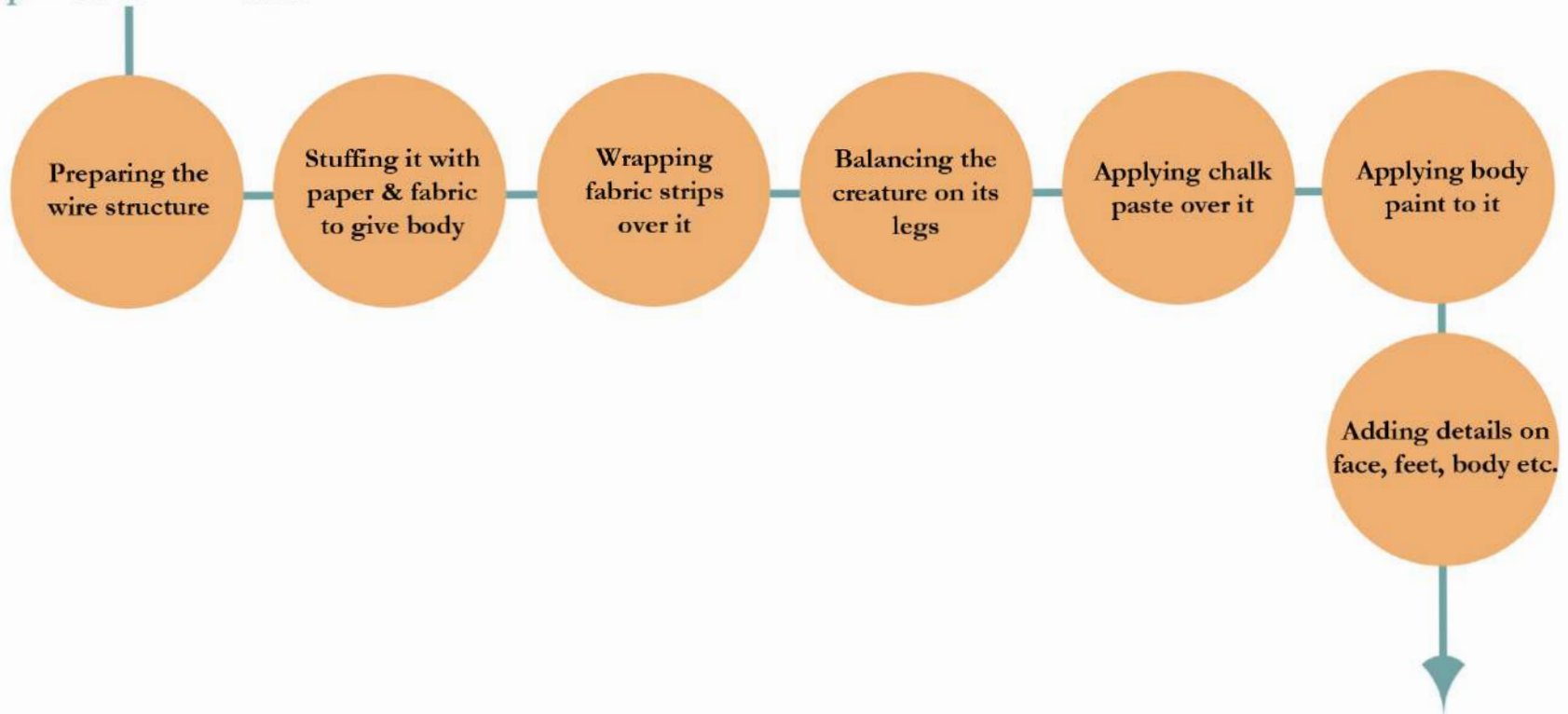




Dolls inspired from the 'Avataar'

# Animals

Simplified & Animated



# ANIMALS

(Simplified/animated)

Process & Outcome

Making the wire structure for various animals



## Wrapping fabric & applying chalk paste



Wrapping old fabric strips to the wire structure



Applying chalk paste to the wrapped structures



Chalk coated animals drying

Painting the animal structures



Applying emulsion as base coat



Mixing desired shades



Painting the animal structures

Final detailing to the animals



Adding facial & other details



The animal once complete

Owl

The selected animals





Thumbnails for facing page



Ox



Cat



Zebra



Dog



Mouse



Crocodiles



Tortoise



Giraffe



Peacock



Penguin



Deer

The selected animals



Thumbnails for facing page



Dog



Rhinoceros



Cow



Duck



Fish



Crab



Whale

The selected animals



Cow

Cock

Frog

The selected animals



Five - headed cobra



Tiger



Frog



Lion

The selected animals



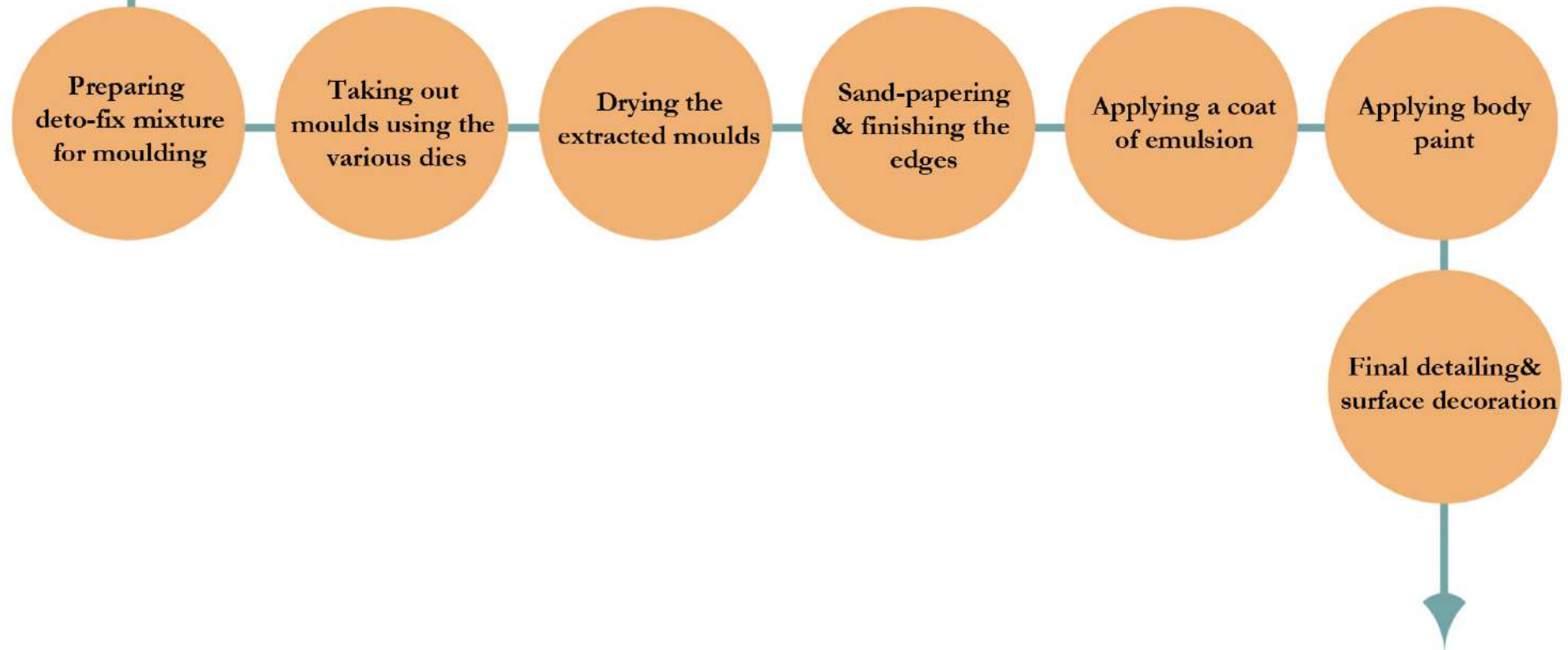
Elephants

The selected animals



Spotted Deers

## Utility Products





# UTILITY PRODUCTS

(Table-top Accessories)

Process & Outcome

Making moulds from dies



Making and filling deto-fix into the moulds to achieve the desired pieces

## Finishing the extracted moulds



Moulds left to dry



Finishing the extracted products



Applying emulsion as base coat





Painting & detailing



Painting desired colours & detailing the products



The selected utility products (fridge magnets)



Lioness



Lizard



Ant



Grasshopper



Moth

The selected utility products (incense holder)



The selected utility products (incense holder)



The selected utility products (pen stand)





The selected utility products (pen stand)



The selected utility products (card holder)



The selected utility products (card holder)



The selected utility products (paper weight)



The selected utility products (paper weight)



The selected utility products (fridge magnets)



Horse



Duck



Cock



Cat

The selected utility products (stick toys)



## Recommendations

- \*All participants need to work together for few hours every day and build on the individual expertise.
- \*With the identified strength - each one can work at what they are good at and the products can be made using assembly line.
- \*It was observed that the participants were not very concerned about the material wastage and how the increased material use would hike up the making cost of the doll. Working in a group and in an assembly line; would help them reduce the material waste and increase efficiency.
- \*Also, it would help to achieve the quality standards – as each job is done by the one, who is expert at it.( like colour mixing, face painting )
- \*Materials incorporated make the products fragile and developing appropriate packaging of the product is highly recommended. This would help the products to travel far safely and have greater reach to the potential markets.
- \*Along with the packaging , creating an identity (brand )for the doll making crafts would help in marketing the products Table top accessories/ stationery products -from the utilitarian product range developed, can be targeted to corporate houses during festive seasons. This would fetch good orders to the doll making group.
- \*With the group of identified participant – it has good scope of developing the craft in to a cluster and to turn it in to business model.



## Reflection of the Workshop

\*Project targets were well achieved – in terms of product refinement, product sizing , quality and finish, exploring different materials and processes, techniques, exploring new forms, product diversification and quantum of work.

\*Balance of the dolls - was successfully achieved after removing the wooden base.

\*There were approximately 116 products developed (assorted – Human form/ doll, non – human – Animal/toy and Utility Product) during this 20 days workshop; which was far more than what was proposed (30 products).

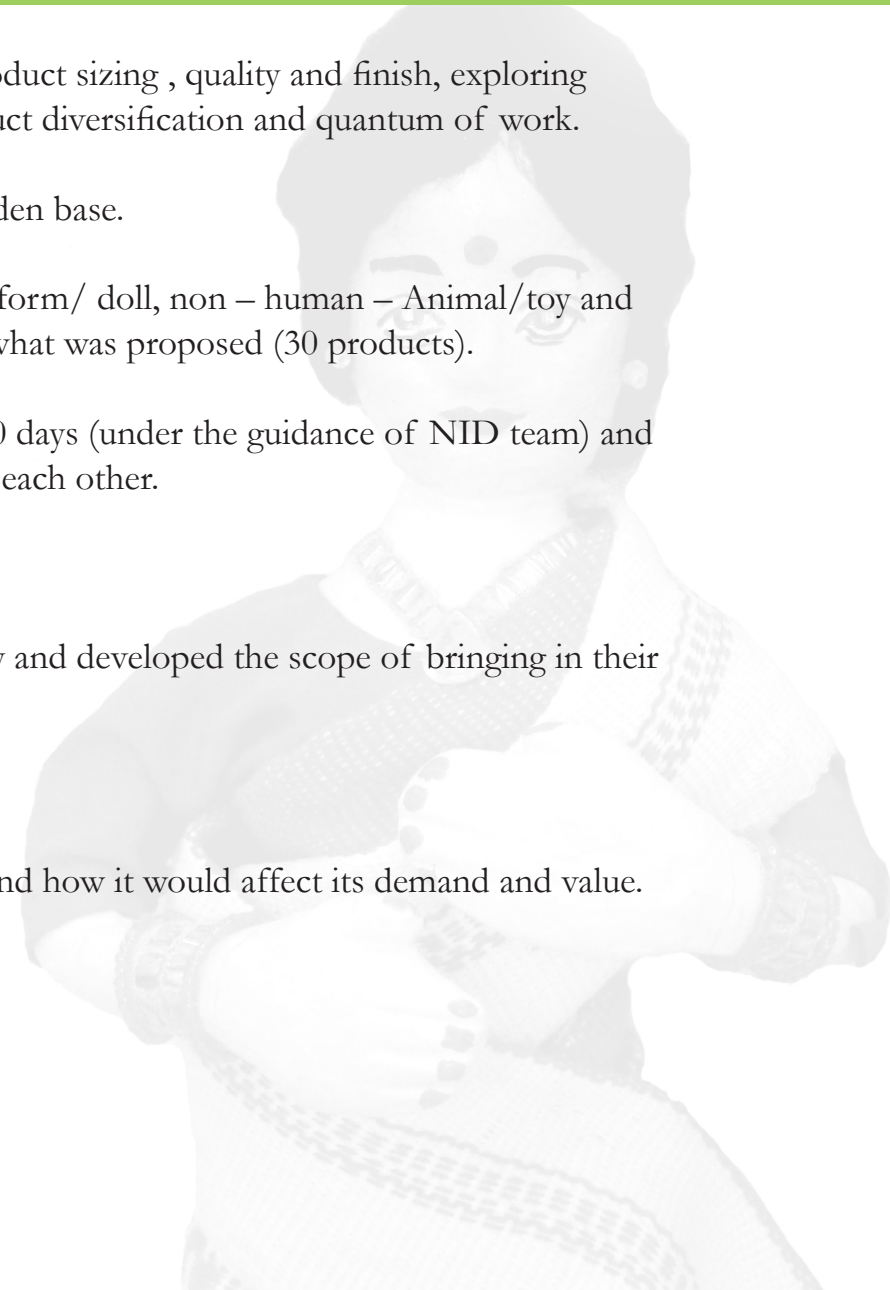
\*The group gained confidence after practicing the craft for continuous 20 days (under the guidance of NID team) and along with fellow participants – there was lot of learning & sharing from each other.

\*They got the practice, much needed, especially for the face painting.

\*Non human/ animal forms gave them a good break from the monotony and developed the scope of bringing in their individuality in to their products.

\*Workshop also made them aware of their strength and weakness.

\*Workshop made them aware about the finish & quality of the product and how it would affect its demand and value.



Display on the closing ceremony



**Thank You**