# INCREDIBLE "HANDMADE IN INDIA" TOYS ON THE BRINK OF EXTINCTION

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#### Abstract

The Indian toy industry is as old as our nation itself. It has been fostering and getting enriched under the intellectually rich background. Indian toys, are manufactured all over the country and reflect the Indian cultural diversity in the range of products manufactured. Local toys are manufactured from various raw materials like, plastic, wood, rubber, metal, textiles etc. This business is preponderantly confined to the Small Scale Industries, meeting the local needs. It is labour oriented and utilizes the skills of master craftsmanship and creative designing. The toy market in India is extensively unorganized and is proportionately very small with reference to the population and per capita income. The small scale nature of hand made toy business has resulted into stumpy product innovation and low investments in new modern equipments and technology, which has over all resulted into small market size. It has been observed that sustainability of toy business depends on constant innovation. Another reason for the small size market is the large number of small players and low advertising and marketing efforts. In Indian homes there is a existing tradition of indigenous toys, yet regardless of it's great worth and value, this area of handicrafts for children is among the most neglected quarter of our cultural heritage. The centuries old legacy has found itself on shaky ground when the markets were flooded with 'Made in China' products which low cost playthings steadily replacing indigenous toys. Livelihoods of these artisans are threatened. The government and NGOs are desperately making an attempt to control the damage and uplift the art to the global market. This paper attempts to study the role of local toys in a child's development and the means to save the extinction of this savoured art.

Keywords - hand made toys, craftsmanship, small scale industry, indigenous, cultural heritage

# Introduction

Indian toys and games kept children not only entertained, but also trained them the nuances of life. They were crafted to unearth the skills and values of society. Indian toys and games are simple and inspired from nature. They were designed on a child's reactions and its application to real life.

**Definition of Toy** - Encyclopedia Britannicaindicates that Toy is a plaything for a child. Playthings to engage one's fantasies and stimulate the imagination, to build with and to learn from, to provide companionship and pleasure in otherwise tedious hours-toys are all of these and more. For infants they are an eye catching diversion, and for older children they often serve as miniature representations of the adult world. For collectors and hobbyists toys are treasured historical objects. In the economies of many nations, the manufacture and sale of toys have become highly profitable.

While attempting to understand early civilizations, researchers focus on architectures, political history and religious practices which formed the cultural backbone of anexperiential society. But humans in all eras knew how to entertain themselves with sports and play. The 4000 year old civilization on the Indus River Valley, too was playing with toys. This might have caught attention and proved important in understanding of the prevailing society and its culture.

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The Indus Valley is known for itsextraordinary engineering achievements of planned cities that demonstratedgreat architectural perceptive. Alongwith these another noteworthy finding was that Indus - enjoyed playing with toys. Archaeologist Elke Rogersdotter has reported that huge assemble of toys were found in specific parts of the Indus cities, which could be interpreted as designated play areas. One tenth of all findings in the Indus valley are play-related, which included toys as well as game pieces likeWheel cart, Rattle, dice. Toys are existing in our society from ancient time as long as toys have existed they have reflected the cultures, society, activities and have played important role in the development of the physique and mind.

#### Lliterature review

Available literature on the Indian toy industry regarding history of Indian toys, traditional wooden toys, the recent trends in the toy market and the challenges for the 'made in India' toys has been reviewed. The data is collected from the sources such as books, project reports published by the state and central governments, and online articles.

# Significance of the Study

It has been observed that the Indian traditional toy industry of which only 10 percent falls under organised market is sold from government sponsored stores and sixty percentof the toys in the Indian market is imported from China, Taiwan, Korea, Singapore, US and UK. This steady flow of imported toys is leading to a tough competition in the local market and forcing many traditional manufacturing units to shut down. It has been observed that in the past 5yrs,40% of the traditional manufacturing units closed down and another 20% are on the brink of closure. The traditional toy manufacturing industry in India is facing severe challenges in recent years and calls for attention and serious efforts to resuscitate and save this industry. Awareness among young parents has to be initiated regarding the unhealthy manufacturing practices in the imported toy manufacturing industry, waste control by rejecting plastic and electronic toys. Our society needs to be sensitized to the importance of organic wooden toys.

## PRIMARY RESEARCH

Since there was limited secondary data available on the customer profiling relevant to the toy industry. data was collected by visiting toy stores in Pune city. Questionnaire was administered to buyers and salesperson. Observation method was used to trail the buying behavior.

## **Classification of Traditional Toys**

We can classify our traditional toys into two broad categories

- 1. **Static** These toys are statuette-type, craft toys which include figurines of dolls, animals, birds, men and women, gods and goddesses, also some depicting various trades like a milk maid potter, and themes related to day to day events such as marriage, bullock cart race, folk dances etc mostly made in wood, metal, clay, leaves, bamboo, paper etc, using locally established craft techniques.
- 2. **Dynamic** These type of toys are mobile and sound-making toys. They are action oriented imaginative playthings. Though dynamic toys are simple they communicate distinctly and directly. Their themes are very often humorous for instance a warrior fighting, a boxing wrestler, a dancing joker, an acrobat somersaulting, a sparrow chirruping and flying, a croaking frog, a humming bee, a galloping horse. All these themes enthrall young children. Also the simplicity of the toy construct is advantageous because they carry an element of surprise.

Both the categories of toys are made by traditional craftsmen as well as by semi-skilled artisans. Some of them are first-generation professionals.

#### **Local Materials**

The hand made toys are made of simple local materials like wood, bamboo, cloth, metal sheets, wire, paper, cardboard, etc. Toy makers who live in cities and industrial areas make use of recycled waste materials such as old newspapers, discarded cartons, metal scraps, boxes, tins, and other odd materials. Even discarded parts of machines and equipment are used very ingeniously. The use of recycled materials have no overhead cost and hence enables artisans to manufacture and sell their toys at unbelievably low prices.

# **Scientific Principles**

The vibrant folk toys reveal in their composition a close relationship with the basic principles of science and technology. When these toys were analysed it was found that more than one application of the laws of science was used eg the basic laws of gravity and equilibrium, levers and leaning planes, the concept of centrifugal forces, energy transformation, the theory of sound, optical illusion, etc. In fact, many of these toys would be useful teaching tools for illustrating principles of physics.

#### **Elements of Technology**

These hand crafted toys are also incredible examples of creative ways and means of using the basic principles of technology. These simple toys work accurately because they adhere to the fundamentals of technology. The artisan designs the toy considering all the aspects pertaining to accuracy, precision and tolerance, assembly of various parts, energy transformation, linkages and mechanics, properties of materials and many more. Dynamic folk toys are replica of our popular arts.

# Toy a means to wellness of children

The American academy of Paediatrics 'play' is essential for the development of the child and youth as it contributes to their cognitive, physical, social, and emotional well-being. Play improves the progress of early development from 33% to 67% by increasing adaptability with the surrounding environment and reducing social and emotional problems.

# Role of Toys and play in development of normal children - A toy guide

# 1. Infancy: 1 year

From zero age to 6 months, the observed activities of the infants are staring, listening, sucking or touching. Infants enjoy looking at their mother and others around them and following them with their eyes. Toys for this age are typically pictures with different faces and bright colors. Babies get fascinated with what their hands and feet can do, they lift their heads and turn toward sound, put things into their mouth etc.

Older babies above 6 months to one year get earning to move and they begin rolling over and try sitting, crawling, pulling themselves up, and even attempt standing. They can construe their own names and other common words and can recognize body parts, put things in and out of containers, and find hidden objects. Recommended toys for these older infants' are baby dolls, puppets, large wooden cubes etc. Infants enjoy exploring and this act stimulates their sensory and overall motor skills as shown in table

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#### Rational

Initially, infants explore their world with eyes and ears only. Their auditory system requires outside stimulation. This includes speech, music and different sounds. Therefore the toys recommended are the ones which create sound, music, movement and attractive with bold and bright colours.

## **2.** Toddler: 1-3 yrs:

Toddlers can walk steadily and even climb up and down. They enjoy listening to stories and learn to speak their first words. They like to experiment but need to be kept safe. Toys recommended are cardboard and wood blocks, washable figurines etc. Toddlers attemptconstructive play which helps in stimulation of fine motor skills, language and cognitive skills as shown in table.

#### Rational

In the 2<sup>nd</sup> year of life, children are explorers filled with acute curiosity and keep wondering. Anactive toddler needs toys for physical play as they gain strength and practice fine-motor skills. Children imitate adults it helps them to develop maestro life skills. Riding toys such as rocking horse stimulates their motor skills like jumping running and balancing

### 3. Pre-schooling:

Pre-schoolers have longer attention spans than toddlers and they talk a lot. They enquire and ask a lot of questions. They like to experiment with things around them, with their still emerging physical skills. They build relationships with people and like to play with friends. They like sharing, exchanging with other children. Toys at this stage are blocks, problem solving toys puzzles, things for enacting social life and building structures with accessories. Pre-schoolers play dramas, mimic. This stimulates their social and behavioral skills.

#### Rational

Children begin to play actively with each other. It is observed that group play and constructive play develops their cognitive functions such as working memory, self-regulation, self-talk. The ability to organize, focus, create strategies, triggers theirplanning ability and help performs other academic skills that determine later success in school. Make believe plays stimulate their emotional and behavioural development Play influences neurological development and determines how intricate neural circuits are wired. Research has indicated that play is essential to human development as much as other basic needs.

## 4. Schooling

Children attending schools are subjected to competitive playing and activities for social development which contributes in making them a responsible member of society and a better human being.

### Rational

Children enjoy activities that requires strategy and skills exhibited by adults. They start playing with situations that they are taught and which they had observed. Competition becomes a motivating force and challenge children to improve their emotional behaviour and to tolerate losing. Outdoor play has found to improve the child's attention to academic tasks. The International Association for the Evaluation of Educational Achievement (IEA) Preprimary Project found that children's language performance at age 7 was significantly higher when teachers had allowed children to choose their own activities at age 4

Age	Toy	Stimulation
Upto 6	Rattles	Visual and auditory senses
months	Crib gyms, safety mirrors	Reaching, grasping
	Large keys, Soft dolls	Hand-eye coordination

Stuffed Toys	Transfer objects from hand to hand
Push and pull toys, Dolls & Telephone	Cognitive & social development
Rocking horse, balls, play vehicles	To achieve a level of realistic detail
Crayons, painting with large brush, Finger	Fine motor control
painting	
Simple puzzles	Problem solving abilities
musical instruments, outdoor games,	Moderate level of real life
make-believe games	understanding
Table games, Skipping rope, Puppets, Paper crafts, Bicycle	Attention span and competitiveness
	Push and pull toys, Dolls & Telephone Rocking horse, balls, play vehicles Crayons, painting with large brush, Finger painting Simple puzzles musical instruments, outdoor games, make-believe games

Playing with toys is one of the finest experiences that children enjoy. It gives them a chance to interact with people other than their family and get public experience. Experts believe that, playing with toys, children develop their physical, mental, social, emotional and creative skills needed for a good life. The various developments assisted by playing with toys are given below:

# 1. Social /emotional development

Playing with toys, help the child to fine-tune themselves with the sharing culture and sustaining in the society. Since social development is one of the key areas of the overall development of the child it inculcates self-discipline, empathy, cooperation and sharing. While playing, the child expresses his/her ideas without any restrictions and disapprovals among the group. Children learn to cooperate with each other by sharing and taking turns as they play a game or build an intricate design. Toy play develops a child's personality, and helps them to realize their potential and they experience the contentment of success. Toy play is also essential to help a child manage emotions, develop values and understand and interpret the world around them.

## 2. Physical development

By means of the practicing coloring, cutting with scissors and playing with peg boards or dressing dolls are just a few activities by which children develop co-ordination of small muscle and dexterity. Children follow eye and hand coordination while pulling up cards or placing pegs in a pegboard. When children string beads or construct with blocks, they improve small muscle skills. Moreover playing with activity based toys enhances their physical development.

#### 3. Cognitive development

Cognitive skills like perception, instinct, and interpretation are developed through playing with toys. All of these are important in the process of acquiring knowledge. When children play with table blocks or make designs with pattern blocks and parquetry blocks, they experiment with construction and invention and use creative problem-solving skills. They also develop their mathematical skills such as counting, selecting, matching patterns and classifying Studies illustrate that children who are involved in imaginative play are creative thinkers who later become better problem solvers. "Child experts agree that dress-up play not only stimulates imagination, it can also be tracked to improved vocabulary and social skills"

## 4. Educational development

Children are born with an natural desire to learn, and educational toys help them to their best advantage by encouraging various integrities of learning. Playing with variety of toys, the child learns to identify shapes, sizes, colours, textures, numeric's and qualities of objects as well as their significance. Investigating, collecting and experimenting with play things provide the child with information that cannot be obtained by any other means. Playing with educational toys readies the child for the school education.

# 5. Moral development

Toy play is an important medium for the moral education of the child. Through play, the child learns what is right and wrong. Children learn to be fair, candid, truthful, self-controlled, except failure and success with diligence. Further the child also learns to play the role of their sex as expected by society in embodying the socially approved patterns of behavior.

## 6. Stimulating the imagination and creativity

Playing with creative toys at an early age help to bring a child's natural curiosity to float up, and help him explore new things Toys are the best means to stimulate the mind's eye of children. Everything around them is a wonderful new experience. Toys like canvas colours, crayons, blocks, building toys etc. are tools for creative growth. Kids love imitating adults in social context such as celebrating functions, holding tea parties, shopping for vegetables and grocery, cooking and cleaning house, role playing etc. Thus playing with toys helps developing creativity.

## 7. Interactive plays

Toys which encourage interaction with others are principally beneficial for their social development. An important quarter of child development is learning how to interact with other people, and there are many interactive toys and games available that help build these relationship skills from an early age. Families make efforts to play directly with their children and also encourage interaction with other neighborhood children through playgroups or social get-togethers.

# 8. Scientific and technological development

As children move into middle school they benefit from toys that encourage learning through scientific experimentation. Biology/Chemistry laboratory sets, microscopes, telescopes, and digital building tools all help to promote strong thinking skills. Children who begin making prototype simple model cars and advance to assembling small motors for school projects are actually expanding their base of knowledge while encouraging their personal interests.

# **Traditional Indian Toys**

## 1. Rattles and Dug Dugi

This jingling Rattles have been the all time favourite toy of infants. Dug-Duggi is a variant of the rattle. Traditional ones are made with wood and leather but the improved and cheaper ones are made with paper. Bamboo is used to make aflat circular ring, which is then covered with coloured paper. Strings, with mud balls or stones at the free end, are attached to either side of the covered ring which is tied to a stick resembling a lollipop. When the stick is swirled left to right, the mud balls or stones attached to the string on either side hit the surface to produce sound.

### 2. Dolls

Quite unlike the glamours dolls of today. Traditional Indian dolls were made from the simplest materials varying from plant shoots, cloth and clay. At times, a mixture of cow dung, sawdust and clay were shaped into dolls and coated with bright paints.

## 3. Bagh Chal (Tiger and Goat)

This classic board game, which originated in Nepal, involves the use of logic and strategy as the goats had to use strategies to ward off and obstruct the path of tigers to avoid being "hunted down". The game play takes place in two phases. In the first phase, the goats are placed on the board while the tigers are moved. In the second phase, both the goats and the tigers are moved. For the tigers, the objective is to "capture" five goats to win.

#### 4. Bhatukli

These miniature versions of kitchen utensils and other household items were scaled down to the greatest detail and were made from copper and brass. These were played with by children as they watched their mothers cook and their family members make use of every day household items. Today, these miniature utensils give us an idea of what life was like in rural households.

#### 5. Pachisi

The Pachisi board was made of cloth in a patchwork design. The four arms/limbs of the board are conjoined at the center called 'Char Koni'. Each arm of the Pachisi has three marked squares, which are called 'castles.' The game set comes with a set of 12 beehive shaped wooden pawns in colors of yellow, black, red, and green. The players throw cowrie shells on the Char Koni and the move of the pawns are determined by the number on the shells that fall with the open face. The objective of the game is to get all the four pawns, allocated to each player, to complete the round of the board as fast as possible. Today, the game has modern variants like Ludo and American Parcheesi.

#### 6. Chauka Bara

Chauka Bara was a traditional race game similar to Pachisi where 2-4 players raced their respective coins on a board of 5x5 squares which the objective of who would reach the innermost square the fastest. Strategy was the main skill required to win the game as each player had 4 coins each and could move them at any time.

# 7. Pallanguli

This game is said to have its origins in the Ramayana when it was created by Rama for Sita to pass her time in captivity. The game begins with six seeds placed in each cup. The player starting first picks up the seeds from any of the holes and, moving anti-clockwise, places one seed in each hole. If she reaches the end of her cups she goes on the other side of the board. When the player drops the last seed she has, she takes the seeds from the next cup and continues placing them in this way. If the last seed falls into a cup with an empty cup following it, the seeds in the cup following the empty cup, are captured by the player. This game is played on Shivratri in the southern states.

#### 8. Chaduranga

Four handed Chaduranga is the predecessor of the modern Chess. The game is played by four players unlike two players on the conventional chess board and also involves the component of chance in the form of a single stick dice known as the *daala*. Four players form two teams of two

players. Player-1 plays together with player-3, and player-2 plays together with player-4. Each player gets 8 characters each, 4 pawns, 1 elephant, 1 horse, 1 ship and 1 elephant.

## 9. Puppets

Puppets were not only the tools of skilled puppeteers, they were also used by parents to tell stories to their children. Children also used puppets to create their own stories spurred by their imagination. It gave them a way to convey their emotions by transferring it to an inanimate object.

#### CLASSIFICATION OF TOY STORES

Study reveals that the organised toy market is classified and purchasers are well aware of the sources from where they can buy.

- 1. Hypermarkets have individual sections dedicated for toys and sport kits which include a overabundance of toys at a single location. Eventually the demographics targeted, range from a toddler to teenagers.
- 2. Toy Stores are destination for toys catering to requirements of all age groups and economic segments.
- 3. Baby Stores make available all stuff required for new born babies and also put up for sale toys for the age group upto 12 yrs.

#### **BUYER CLASSIFICATION**

With the help of data collected, buyers could be segmented into three categories

- **1. Parents** factors that influenced their purchase of toys were as follows:
- a. Cost of the toy was one of the most significant factor in terms of selection. The perception of repeated purchase made them unwilling to spend more. They had a strong notion that toys never last long and had to be bought frequently.
- b. It was observed that the purchase decision of parents is highly influenced by the child's presence. In absence of child, most parents preferred games, puzzles and other board games because they perceived educational values attached to them. If the child was accompanying the parents, the selection was motivated by the child's preferences. Action figures were primary attraction for kids &a decline for traditional favorites like Hot wheels & Barbie was observed.
- c. There was no significant preference between Indian & Chinese toys. When informed about the negative effects regarding the poor material quality of Chinese toys, they were skeptical about buying Chinese toys.

Parents who were not price conscious, preferred branded toys over unbranded ones

- **2. Gift Purchases -** While shopping toys for gifts, the following facts were observed. Cost was definitely one of the significant factors for selection. Sales person played an important role in selection of toys. They recommended the trendy toys. Most of the purchasers went by the recommendation of the salesman and their pre-decided budget.
- 1. The buyers had no preference between Indian & Chinese toys.
- **2.** Toys was an occasional purchase with most of the buyers.

- **3. B2B customers** They are mostly Pre-schools, Creches, Societies, Children Parks, Resorts, Hospitals, Clinics. Factors influencing their purchases were
- 1. They are quality conscious as it is associated to their brand value.
- 2. Distributors promoted bulk purchase, which was one time. Larger group of schools and playschools chainshad centralized buying facility.
- 3. All the bulk purchases had a fixed assortment of toys differing only in colours.

# Traditional Indian Games and Toys on the verge of extinction

The earnings of folk toymakers are considerably very low. The buyers of these hand made toys are mostly lower income group families who cannot afford high price. The low economic returns on the sale of these toys is one of the reasons for large dropouts of toy makers. The second reason is the alarming inroads made by the factory-made plastic toys. Even though the folk toy makers are facing economic challenges and lack of any institutional support they have kept the trade and art alive. They have no support and facility for taking forward their innovation and creativity, Due to limited choice, purchasers resent from buying folk toys. Our local toys have significance of our culture and connect us to our roots, but has been neglected by society for long.

# Educationist bring in rays of hope

In recent times, the array ofthoughts has made a mark on educationists and child development experts that artisans' toys cannot be replaced factory made toys. Our society will now have to accept that toymakers have a much broader role to play than merely being producers of playthings. They need to be recognized as a professional in his own right.

A lot needs to be done to recover the lost heritage. Since a few years ago the Development Commissioner of Handicrafts, incollaboration with the National Institute of Design, had formulated proposals, which would revitalise this sector. But for public awareness it is necessary to build toy museums, training centers and on commercial aspects government should initiate marketing tie-ups at the state as well as national levels. It is essential to create a platform where innovative and talented toymakers, educationists and dedicated designers' team up to revamp this sector.

# Challenges faced by Indian artisans are:

- 1. The unavailability of a professional course in toy designing in the country's educational system.
- 2. Insufficient business knowledge and poor communication skills.
- 3. Absence of proper distribution channels for nationwide sales,
- 4. Limited production and Low profit margin,
- 5. Most buyers have low purchasing power
- 6. Poor supply of good quality materials,
- 7. Insufficient knowledge about toy manufacturing technology
- 8. Small scale industry is facing operational problems such asnon-availability/limited natural raw materials, electricity,training and also lack of government attention/support.
- 9. Market related issues are large imports, diversity factors, marketing and distribution channels, marketing strategies, communication barriers, inadequate expense-profit ratio

# **Findings**

Soft toys and electronic toy categories are the major imported toy category in Indian market and Chinese imports negatively influence the conventional industries. Both branded and non branded segment of toys are being sold in the markets which exhibits retailers dependence on non-branded Chinese toys. The use of low quality and toxic materials in certain toy brands in the past few years, is increasing parents stress on the quality of conventional toys. The areas of problems faced in Indian toy industry are product range and diversification, price and profit margin, customer demand and availability, design improvements, changing needs of the market, outdated technology and infrastructural support. This problem weakens the sale of Indian toy brands and gives China an advantage to control over the Indian toy market

#### Conclusion

Indian toy manufacturing industry is the livelihood of around 5000 craftsmen and their families. Many families are into this traditional art and craft from centuries. Last few years brought significant changes in the Indian toy industry. 40% of the artisans lost their traditional employment due unconventional developments in the market, and it continues to be severe in the coming years. It is high time for conventional toy manufactures to be organized for their sustainability and government to pilot on the promotion and growth of this industry or else we may lose the traditional industry which helped to nurture the Indian childhood from 18th century.

#### **Recommendations:**

- 1. First recommendation for traditional toy industry is to have organized operations under cooperative society or rural communities. This will help in collective bargaining and will avoid hierarchy of middlemen.
- 2. Small scales industries also need to implement the marketing strategies such as Branding, Positioning and advertising.
- 3. Under the organized operations there should be consistent participation in promotional programs such as trade shows and handicraft exhibitions. Societies should build association with state handicrafts corporation and other promotional organizations for collaborated operations.
- 4. Geographical identifications (G.I)for the toys can play a major role in building the trust and the goodwill for the industry. Also there should be extended arm operations to online marketing. Studies reveal that the share of internet retailing in sales grew from 1 % in 2007 up to 18 % in 2016.
- 5. Extended support from central government such as new regulations in import policies to control the large import of cheap and hazardous products.
- 6. Government authorities also to help in create awareness in common people by creating national campaign on traditional organic toys.

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