



**Traditional Indian toys,
handmade by Indian artisans**

Wooden toys in India

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*The toy-making industry is
part of the country's rich
cultural heritage, but action is
needed if it is to prosper.*

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People have been making wooden toys on the Indian subcontinent since the civilizations of Mohenjodaro and Harappa, up to 5 000 years ago. Today, wooden toys are manufactured by traditional artisans throughout India and especially in the north, northeast, centre and south, depending on the availability of raw materials. A wide range of timbers is used, such as the lightweight species *Givotia rottleriformis* in Karnataka and *Wrightia tinctoria* in Andhra Pradesh, and the well-known sandalwood (*Santalum album*) and rosewood (*Dalbergia sissoo*). But the industry is under threat, including from a lack of raw materials. This article discusses some of the issues facing Indian traditional wooden toy-making and the actions required to ensure its viability.

INDIA'S TOYMAKERS

Traditional wooden-toy making constitutes an important part of India's cultural heritage. Traditional toys depict, in different ways, the country's rich history, mythologies, legends, folklore and plant and animal life, and they

have always been popular in both urban and rural markets. Thus, Indian wooden toys have a tradition of linking play and amusement with religion, history, art and education.

Traditional wooden-toy making is conducted mainly at the cottage-industry scale, and most artisans are "unorganized", meaning that they operate independently (Kumar *et al.*, 1996a). Traditionally, artisans use very simple hand tools, but some are turning to power tools such as lathes, jigsaws, circular saws, fretsaws and spray-painting equipment. The wood favoured by artisans is soft to moderately hard, has a fine texture and is easy to carve into desired shapes, although ultimately the choice of wood depends on availability. Traditional toymakers use lac, an insect-derived substance that is melted and solidified into sticks. The required size and shape of wood is cut, seasoned, attached to a lathe operated either manually or by motor, and turned in order to smooth it. Chisels are

used to shape the revolving piece of wood, and flaws are sandpapered. The surface is lacquered by rubbing lac sticks into the revolving wood.

MAJOR CENTRES OF TOYMAKING

The main centres of wooden-toy making are Meerut, Moradabad, Sharanpur, Nagina and Srinagar in northern India; Assam, Tripura, Nagaland, West Bengal and Rajasthan in the northeast; Bhopal and Jabalpur in central India; and various centres in southern India (see Table 1, which also shows the main timber species used, by state and population centre, in southern India). Some areas have particular specialties, such as idols in sets of various shapes, animal figures, and models of musical instruments.

CHALLENGES

The problem of raw-material supply

The materials used in traditional wooden-toy making fall into two categories: wood, the basic raw material from which toys are made; and subsidiary materials such as aluminum, zinc, waste coir and cotton, mogali (kewada) leaves from *Pandanus fascicularis*, sawdust, ochre (derived from clay containing mineral oxides), orpiment (an arsenic sulphide mineral compound), chalk powder, gums and pastes, gurjan oils (from *Dipterocarpus turbinatus*), and other natural colours and paints.



India has a rich diversity of tree species, including about 1 600 species with timber of commercial value. The major species used traditionally in the toymaking sector are *Adina cardifolia* (haldu), *Ailanthus excelsa* (maharukh), *Albizia lebbek* (kokko), *Artocarpus heterophyllus* (kathal), *Artocarpus hirsutus* (aini), *Alstonia scholaris* (chatian), *Anogeissus pendula* (kardahi), *Azadirachta indica* (neem), *Chloroxylon swietenia* (satinwood), *Cinnamomum zeylanicum* (cinnamon), *Diospyros ebonum* (ebony), *Dysoxylum malabaricum* (white cedar), *Gmelina arborea* (gamarai), *Hardwickia pinnata* (piney), *Juglans regia* (walnut), *Lagerstromia microcarpa* (benteak), *Pterocarpus marsupium* (bijasal),

Sterculia urens (gular and tapsi), *Toona ciliata* (toon), *Wrightia tinctoria* (ankudu, jeddapaala, tedlapaala), *Pterocarpus santalinus* (red sanders), *Givotia rottleriformis* (puniki) and *Gyrocarpus jacquini* (helicopter tree, propeller tree, stinkwood) (Kumar *et al.*, 1995, 1996a, 1996b).

However, the industry is facing an acute shortage of many of these species due to overexploitation (not exclusively by wooden-toy makers), which is pushing up the prices of the wood and hence of the handicrafts themselves. Squeezed by higher costs, many artisans are abandoning their professions (Kumar *et al.*, 1995).

For example, the artisans of Nirmal and Kondapalli, in the state of Andhra Pradesh, depend on *Givotia rottleriformis* for various types of toys. In Nirmal, the annual requirement for wood of this species is 40 m³, and 50–60 families derive their livelihoods by using this species for making toys (Rao *et al.*, 2001). However, *Givotia rottleriformis* is becoming scarce because of the overexploitation and degradation of the forest in which it grows. The situation is similar in Kondapalli. The artisans of Ettikoppaka in Andhra Pradesh depend on the wood of a small deciduous tree, *Wrightia tinctoria*. Anecdotal information suggests that nearly 200 families in Ettikoppaka and the surrounding area are dependent on

TABLE 1. Timber species used for toymaking in southern India

Species	State	Population centre
<i>Givotia rottleriformis</i> (puniki)	Andhra Pradesh	Nirmal, Kondalpalli, Tirupathi
<i>Wrightia tinctoria</i> (ankudu, dudhi)	Andhra Pradesh	Nirmal, Ettikoppakka
	Karnataka	Channapatna, Sagar
<i>Pterocarpus santalinus</i> (red sanders)	Andhra Pradesh	Chittoor, Tirupathi
	Karnataka	Sagar, Mysore
	Kerala	Thiruvananthapuram
<i>Dalbergia latifolia</i> (rosewood)	Andhra Pradesh	Hyderabad
	Kerala	Thiruvananthapuram
	Karnataka	Mysore
	Tamil Nadu	Tanjavore
	Andhra Pradesh	Rajamundry

Source: Rao *et al.*, 2001

toy making based on this raw material (Rao, Balaji and Joshi, 2011). There is an urgent need for these artisans to shift to alternative species, especially plantation species, because *Wrightia* is becoming scarce.

Our institute has carried out studies of alternative species, now being grown in plantations, that may provide suitable wood for toys and other handicrafts. They include *Acacia auriculiformis* (earpod wattle), *Eucalyptus camaldulensis* (river red gum), *E. citriodora* (lemon scented gum), *E. tereticornis* (mysore gum), *Leucaena leucocephala* (subabul), *Maesopsis eminii* (musizi), *Swietenia mahogani* (mahogany), *Dalbergia sissoo* (sissoo) and *Simarouba glauca* (oil tree) (Kumar *et al.*, 1995; IWST, 2008).

Lack of conservation of genetic resources

Given the shortage of traditional raw materials, there is a need to ensure that a sufficient area of planted forest is available to meet the needs of the traditional wooden-toy industry. Potentially, this industry is a good source of foreign exchange and also a vehicle for maintaining cultural heritage (Rao *et al.*, 2001), as well as a provider of employment and income in rural communities. However, there is little

ongoing effort to generate scientific data on the working and carving qualities of tree species that could provide alternatives to Indian woods.

So far, the conservation of the genetic sources of the main Indian tree species used in the wooden-toy industry has not received due attention. There is an urgent need to conserve existing forests, bring these species under sustainable management and afforestation programmes, and encourage the use of alternative plantation-grown species.

With a few exceptions, wooden-toy makers lack sufficient support from research institutions, government agencies and private companies, due to a lack of interaction and political will.

Gender exploitation by traders

Export traders often bypass women during procurement processes, even though many women make export-quality products (group of craftspeople in Chennapatna, personal communication, 2012). This bias may be partly because women mostly use hand lathes and exporters prefer articles made on power lathes (which men are more likely to use than women, and which provide products

of more even quality). It may also reflect the continuing low profile in the industry of women, who have traditionally catered to local clients and markets.

Low prices

Artisans complain that while raw-material prices increase, the prices paid for their products remain static. This is partly because of the presence of intermediaries between suppliers and purchasers in export, wholesale and retail markets and partly a function of product substitution and the need for product diversification. As synthetic substitutes flood the market, prices for handmade products cannot be expected to rise unless they acquire a new level of desirability. It is necessary to improve designs and diversify products, which requires new skills and training (Rao *et al.*, 2001).

A SUCCESS STORY

Channapatna, in Karnataka, is home to more than 5 000 skilled craftsmen whose livelihoods are based on wooden-toy making. According to the artisans themselves, they earn Rs 300–350 per day; an income of Rs 5000–6000 per month enables a family to lead a fairly



decent life in Channapatna (Rao *et al.*, 2001). Some years back, their industry was threatened by a flood of low-cost, plastic “made in China” toys on the market, which quickly replaced traditional handmade wooden toys and jeopardized the livelihoods of the artisans. The industry survived, however, thanks partly to the efforts of the state government and some non-governmental organizations (NGOs), which provided the industry with crucial support. Many artisans who had migrated to other cities in search of employment have now returned to Chennapatna as the industry gains momentum and economic importance. The Karnataka State Handicraft Development Corporation is running a common facility centre, in which artisans pay a small fee to use the facilities. NGOs such as Maya Organics have developed new designs to help the artisans further develop their products. About 1 000 registered members avail themselves of the benefits offered by the Karnataka State Handicraft Development Corporation to encourage the industry, including funds for health schemes and training on new designs, and the government is providing loans to help improve the facilities.

ACTIONS TO MAKE THE INDUSTRY SUSTAINABLE

The following actions are needed to address the problems facing the traditional wooden-toy sector:

- provide technological support and training, including in social and design trends;
- establish training centres to improve the skills base, including in design, manufacture and marketing;
- conserve natural forests used to supply the sector, bring them under sustainable management and, where necessary, reforest them;
- evaluate the working, carving and turning qualities of alternative woods that might substitute for traditional species;
- encourage the use of alternative plantation-grown species suitable for the sector and establish and sustainably manage plantations of them;
- increase the scale of production, depending on the feasible level of sustainable

raw-material supply, by providing sufficient infrastructure;

- develop adequate material testing and performance measurement and upgrade production processes to improve the quality and safety of products;
- use innovative marketing to increase reach and build new marketing channels.

One way to increase the profitability of makers of traditional wooden toys would be to cut the middleman from the trade. A mechanism is needed to enable wooden-toy makers to sell their products directly to government and private agencies at a pre-fixed rate. Certain government agencies collect and sell the product of cottage industries through various markets in India’s temple towns and through state handicrafts development corporations, such as Leepakshi (Andhra Pradesh), Pumpar (Tamil Nadu) and Cauvery (Karnataka). But to properly support the wooden-toy makers, such agencies need to be strengthened.

THE FUTURE OF INDIA’S WOODEN-TOY INDUSTRY

The Indian middle class has emerged as a major consumer force; its purchasing power is now equivalent to that of the entire European market (Rao *et al.*, 2001). India’s wooden-toy artisans create beautiful things. Considering the retail boom and the changing consumption habits of the middle class, which favours the use of toys as a medium for entertainment and education, the wooden-toy industry in India could – if adequately supported – experience major upward growth.

In our view it is the duty of society, which benefits from the artistic creations of the wooden-toy makers, to assist them. The most important factor is the availability and affordability of the raw material with which to practise their craft. A dwindling supply of wood from natural forests has caused an escalation in the cost of the raw material. The problem of raw-material supply can be overcome by using the wood of alternative species, grown in plantations. There is an urgent need to conserve existing forests and bring them under sustainable management and reforestation programmes, and to

encourage the use of alternative plantation-grown species. At the same time, wooden-toy makers need assistance to upskill in the face of international competition in the toy market. ♦



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