Linking Local Knowledge to Global Markets: Livelihoods Improvement through Woodcarving in India

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Role of traditional knowledge for the conservation science is acknowledged but the evidence related to its direct contribution to livelihoods and household income is often overlooked. Recent importance to woodcarving in India provides opportunity to explore if, and under what conditions, traditional knowledge on woodcarving contributes to livelihoods improvement and household incomes. There is a paucity of good studies on woodcarving in India but the preliminary information provides inference that a comparatively much better policy and governance, good infrastructure and a growing tourism play vital role in supporting local artisans and entrepreneurs to use their traditional knowledge for generating large household incomes. Although it seems plausible that local knowledge can support livelihoods improvement with suitable interventions, robust studies are urgently required to provide operational models for linking livelihoods and conservation through trade in woodcarving. Suitably designed action research is likely to provide insights for supporting livelihoods through woodcarving as well as promoting the tree-growing in agroecosystems to supply raw material for woodcarving enterprise.

Keywords: Woodcarving, Traditional Craft, Rajasthan, Jodhpur, Jharkhand

1. Introduction

Traditional knowledge and skills as intellectual property of local people are valued for its potential contribution to the sustainability of ecosystems and livelihoods improvement of local communities. In particular, linking scientific, experiential and traditional knowledge to field and policy action offers potential for supporting local livelihoods and environmental conservation¹⁻³. While the role of traditional knowledge for the conservation science is acknowledged, the evidence related to its direct contribution to household income is often overlooked⁴.

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Recent importance to woodcarving in India provides opportunity to explore if, and under what conditions, traditional knowledge on woodcarving contributes to livelihoods improvement and household incomes. The purpose of this article is to explore the available literature, identify knowledge gaps, and set priorities for research that contributes to operational models for livelihoods improvement through linking local knowledge on woodcarving to global markets.

2. Carvings as the oldest traditions of figurative art

Engravings and carvings are the earliest and enduring form of sculptures produced by humans. The Middle Stone Age abstract representations engraved on pieces of red ochre from Blombos Cave in South Africa have been dated about 77,000 years ago. These engravings support the evidence for emergence of modern human behavior at least 35,000 years before the start of the Upper Paleolithic⁵. Furthermore, origin of the figurative art is now considered as a crucial threshold in human evolution. Figurines carved from mammoth ivory at Hohle Fels Cave in the Swabian Jura, Germany provide evidence for the appearance of figurative art more than 30,000 years ago. These Aurignacian sculptures belong to one of the oldest traditions of figurative art known worldwide⁶.

3. Worldwide existence of traditional knowledge on woodcarving

Starting with these pioneering steps, a continuous history of nature-society interactions gave rise to a large body of traditional knowledge in diverse fields including⁷: (i) hunting, fishing and gathering; (ii) agriculture, animal husbandry, tree cultivation; (iii) preparation, conservation and distribution of food; (iv) location, collection and storage of water; (v) coping with disease and injury; (vi) interpretation of climatic phenomena; (vii) manufacture of clothing, tools, crafts and woodcarving; (viii) construction and maintenance of shelter; (ix) orientation and navigation on land and sea; (x) management of nature-society interactions; and (xi) adaptation to environmental/social change.

Amid such a diverse body of knowledge, the art of woodcarving is of particular interest because it combines aesthetics with utility. Contribution of woodcarvings

to livelihoods is now well researched in Kenya, South Africa, Uganda, Zimbabwe, Indonesia, and Mexico⁸. Oaxacan wood carvings from Mexico are known worldwide⁹. For instance, the woodcarvings in Kenya are estimated to support livelihoods of ~80,000 carvers and their 500,000 dependents, generating export earnings of \$US20 million to markets in North America, Asia, and Europe¹⁰. Likewise, woodcarving in South Africa provides household income between US\$500-2000 per year, which is about 80% of the household cash¹¹. Export earning in Bali region of Indonesia amounts to US\$100 million annually¹¹. In India, Rajasthan is considered the cradle of string puppetry that helped in specialized woodcarving for puppet-making¹². There are numerous such examples showing the links between local knowledge and livelihoods improvement across the world¹³⁻¹⁵. Recently, a range of case studies from Australia, India, Africa and Mexico provide further evidence of woodcraft's critical links to rural livelihoods, deforestation, biodiversity and conservation, forestry and forest policy and the international trade regime¹⁶.

4. Woodcarving in India

Although study of woodcarvings in India has just begun, the country has emerged as one of the largest producers of woodcarvings globally. Woodcarving export in 2002-03 amounted to Rs. 5113.5 million (US\$ 113.55 million) (**Figure 1**). The noteworthy issue here is that even though many states in India are rich in traditional woodcarving¹⁷, their contribution to the national export pool varies widely. In order to learn about other enabling factors, apart from the existence of traditional knowledge, it is useful to compare the woodcarving enterprises in Rajasthan (western India: wood deficit region) and Jharkhand (eastern India: wood surplus region).

Rajasthan

Jodhpur in Rajasthan has rich tradition of woodcarving in the form of wood figurines, deities and artistic furniture. During the ancient and medieval periods, rulers of Rajasthan supported the woodcraft by providing patronage to woodcarvers and artisans¹⁸. Numerous exhibitions of decorative and industrial arts are said to have been organized in the past to promote innovation¹⁹.

Woodcarving has now developed into a leading enterprise that thrives partly on local wood from plantations and partly on purchase of wood from adjoining states (chiefly from Uttar Pradesh). Woodcraft industry in Jodhpur now provides employment to more than 1,00,000 people and generates exports worth Rs. 400 crores annually²⁰. Indeed, the anecdotal sources suggest that exports have grown in recent years and the value could now be as high Rs. 1200 crore. Woodcarving contributes substantially to household income too ranging between Rs. 20,000 to Rs. 37,000 per annum depending upon the skills of woodcarvers¹⁹. Although this income is substantial compared to the average per capita income of India (Rs.12,414), the profit margins on woodcraft products manufactured by artisans are only 7-10% while profit margins for exporters are as high as 25-35%²¹. This is very similar to other traditional knowledge based enterprises where middlemen earn 35-40% of the total profit²².

Jharkhand

Similar to Jodhpur, many districts in Jharkhand too have rich tradition of woodcraft. Jharkhand is particularly known for deities, artistic furniture and variety of musical instruments known locally as arbansi, bansuri, damama, dhak, dhamsa, dhol, ghanta, jurinagra, karha, kartal, madanvari, mandar, manjhira, nagara, sahnai, sankh, singa, tasa, thapchanchu, visamdhanki etc. In addition, toy making is also developing as a new craft industry using a variety of soft wood trees available in plenty within Jharkhand. The contribution of woodcraft to household income or the total volume of trade in Jharkhand is not known, but our preliminary survey indicates that the exports are negligible and the average household income for artisans who sell their products locally remains below Rs. 8000 annually.

Comparative position in Rajasthan and Jharkhand

This stark difference in the two states, as discussed above, is intriguing and begs the question as to why the woodcarving knowledge in Jharkhand does not contribute substantially to household incomes? There are many conditions that can explain why the markets may not have worked in favour of poor people²³, but, in addition to the necessary pre-condition of existence of local knowledge,

three additional factors may have contributed to the growth of woodcraft industry in Jodhpur compared to Jharkhand. First, a supportive policy environment and governance is necessary to promote woodcarving industries as an important contribution to livelihoods improvement. Jharkhand being the newly created state, it has only recently issued a policy intent to boost the manufacturing of sophisticated and intricate handicrafts in cane, bamboo, woodcarving and lacbased items, while government has vigorously promoted and encouraged woodcraft industry in Rajasthan. Second, infrastructure has a decisive effect on development. Woodcarving industry in Jodhpur benefited from the infrastructural support such as an outstanding road network, communication, electricity and export promotion facilities including dry ports. Such facilities are comparatively less developed in Jharkhand. Indeed, Jharkhand has to travel 80% of the distance to reach the level equivalent to the state with the best infrastructure in India, compared to 56.9 for Rajasthan²⁴. Lastly, a vigorous investment to promote tourism in Rajasthan provides a ready market and buyers from all over the world. In Jharkhand, however, organized tourism is yet to develop.

Can woodcarving trade reconcile development and conservation?

Woodcarving cases are often dealt with other non-timber forest products (NTFP) in literature. Some of the recent studies involving NTFP (including woodcarving) suggest that NTFP trade is unlikely to reconcile development and conservation of natural forests unless powerful innovations are put in place. A recent study that forms part of the world's largest and most comprehensive NTFP research is a case in point. On the basis of the analysis of 55 cases across Asia, Africa and Latin America, the study team at Center for International Forestry Research (CIFOR) concludes that commercial production of non-timber forest products is not likely to reconcile the goals of conservation and development. "More of the one tends to mean less of the other" How can we link this knowledge to field and policy action related to woodcarvings?

Although specific studies in India are required, but it seems efforts to achieve NTFP-based development need to create conditions that enable people to intensify forest product management and production and improve their market access. But because these same conditions tend to have negative impacts on

natural forests we may have to promote tree-growing in agroecosystems to solve the dilemma and craft win-win solution for conservation and livelihoods. Governments and conservation and development organizations working in this area need to understand these trade-offs before attempting the reconciliation of development and conservation. The case of Jharkhand woodcarving can be categorized towards the subsistence strategy while Rajasthan case can be categorized as supplementary strategy²⁶. The efforts may have to be directed towards the wood production for carvings locally in agroecosystems.

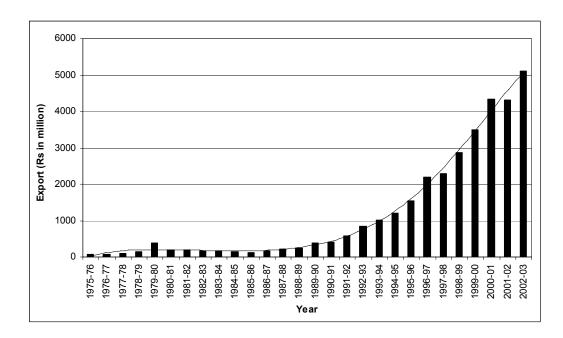


Figure 1: India's exports of woodcraft (source: updated from ref. 13 and citations therein).

5. Further opportunities for action research to strengthen livelihoods and conservation

From the exploratory discussion here, we can infer that a comparatively much better policy and governance, good infrastructure and a growing tourism play vital role in supporting local artisans and entrepreneurs to use their traditional knowledge for generating large household incomes. States desirous of promoting woodcraft as a revenue earning and poverty reduction strategy will do well in addressing the issues identified here.

Emergence of woodcarving as an important source of income to local artisans worldwide has three other advantages too: it facilitates long-term locking-up of carbon in carved wood coupled with creation of new carbon sequestration potential through intensified tree-growing; supports local knowledge on woodcarving and tree-growing, therefore, further strengthens livelihoods; and it also helps in promoting local trade and industry as a revenue-earning activity for the local governments. Processes such as these are expected to enhance the ability of developing countries to participate in the growing global economy.

Although some perspective is discernible from the available literature that traditional knowledge on woodcarving can support livelihoods improvement with suitable interventions identified here, robust studies are urgently required. Studies are also required to find ways to integrate the woodcarving enterprise with joint forest management (JFM). It has been pointed out that although JFM has succeeded in arresting the forest degradation, its poverty reduction objective has not been fulfilled. Kumar (2002)²⁷ notes: "JFM regime reflects the social preference of the rural nonpoor, and that the poor are net losers over a 40-year time horizon". There is a possibility that collaboration of JFM committees and wood-based private enterprise can contribute to the household income of rural people by using their knowledge to add value to wood. Wood-carving industry offers a promise in this regard. Well-designed action research will go a long way in providing insights that can both promote the livelihoods of the poor people and link it through joint forest management for possible supply of raw material to woodcarvers.

Promoting woodcarving is expected to encourage application of other forms of traditional knowledge and skills such as tree-growing in agroecosystems to supply raw material for woodcarving enterprise. Because the species useful for woodcarving are often overexploited in forests, tree-planting in agroecosystems by local communities should be encouraged to supply wood for making woodcarving and reduce pressure on the forests. Integration of traditional knowledge with modern science and technology can bring new innovations. Innovations with already existing skills and knowledge such as woodcarving—rather than completely new interventions—may be a better option to concurrent

efforts aimed at poverty reduction, livelihoods improvement and biodiversity conservation.

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