



COCONUT WOOD CANOE

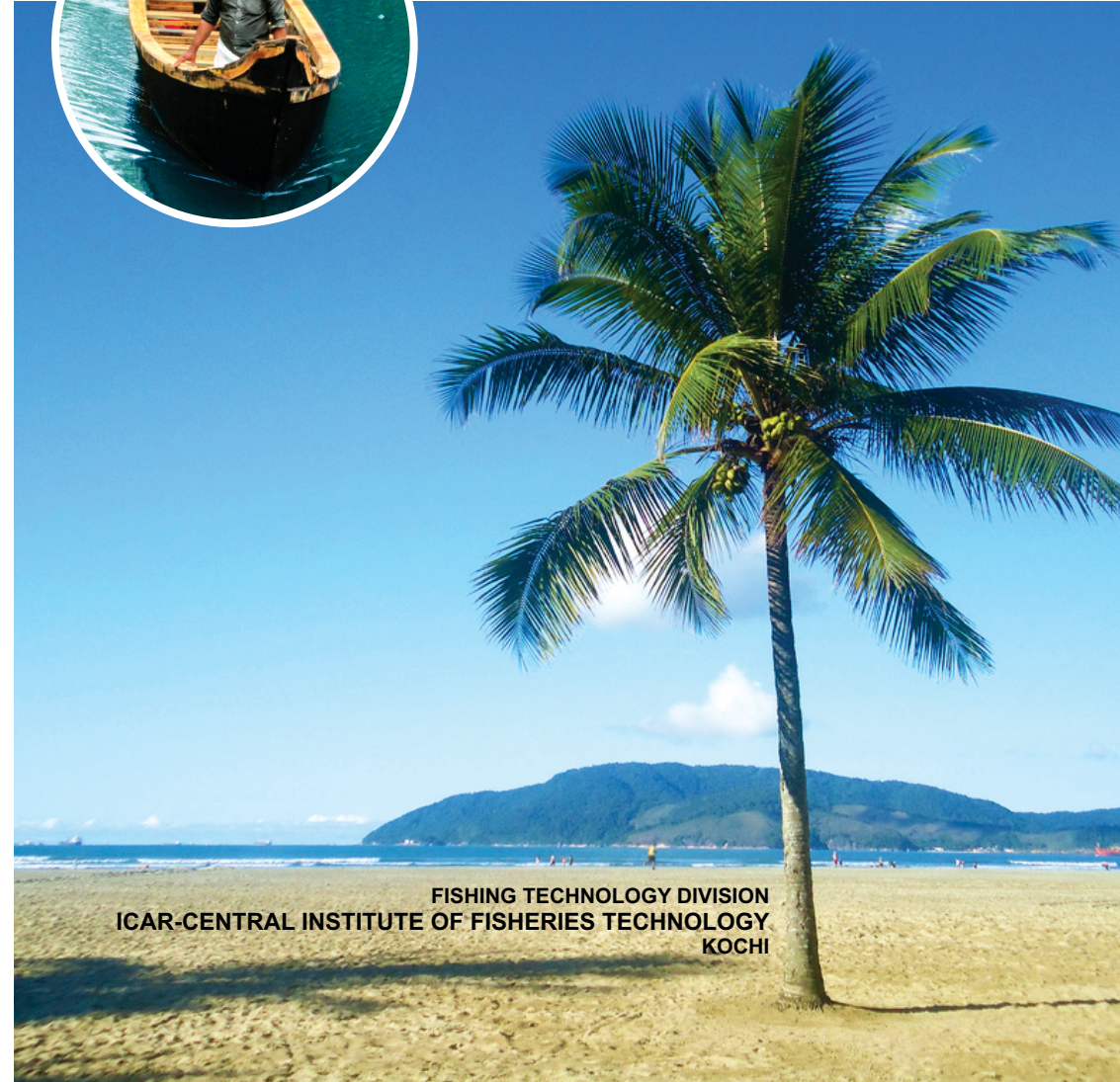
FOR ARTISANAL FISHERIES SECTOR



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Coconut Wood Canoe

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Wood has been a traditional boat building material for small scale fisheries sector in India, despite the advent of new materials. The increasing scarcity of the conventional boat building timbers like jungle jack (*Artocarpus hirsutas*), punna (*Calophyllum inophyllum*), mango (*Mangifera indica*) etc, has necessitated the search for alternate materials. Rubber wood has already been successfully demonstrated as a boat building material by ICAR-CIFT Cochin. Coconut wood is another material that has been zeroed in considering its availability, especially in coastal states and islands of the country.



The coconut palm is known as the tree of life and it is an important plantation crop of India and is widely grown in states like Kerala, Karnataka and Tamil Nadu. India is the third largest producer of coconut in the world. In 2012-2013, the area under coconut palm was 2.13 million hectares. Coconut wood mainly comes from old coconut trees and has been used as structural and interior design material. The outermost high density portion of coconut palm is hard, durable and possesses good physical and mechanical properties. Thus it can be an alternative for conventional boat building timbers. About 0.30 cubic meter usable wood can be obtained from a palm aged about 60 years.



The construction of the coconut wood canoe was carried out under a project titled “Techno – Economic Feasibility of Coconut Wood Canoes for Small Scale Fisheries Sector in the South West Coast of India and Lakshadweep” funded by the Coconut Development Board, Government of India. The project demonstrated that chemical preservative treatment can improve the durability of coconut wood considerably under various environmental conditions. The preservative treatment on the coconut wood panels were standardized based on the BIS standards to enhance its physical and mechanical properties. After standardizing the treatment parameters for increasing the durability of the wood, a canoe of dimension 9.0 m L_{OA} , 1.50 m breadth and 0.70 m depth was constructed for use by the artisanal fisheries sector. This is operated with a 9.9 hp OBM. The Kannamali - Cheriakadavu Fisheries Development Welfare Co-operative Society is conducting the field trials.

The construction of fishing canoe with coconut wood is economically at par with the cost of craft built from other traditional, but increasingly scarce timber. The coconut wood canoe is also cheaper when compared to the cost of preferred *aini* wood canoe. Further refinement of the preservative technology and increasing the scale of production of the craft may further bring down the costs.

