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Titolo Forest Science : Sustainable Processes and Wood Products / / edited by

Elias Costa de Souza, Subramanian Senthilkannan Muthu

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Collana Environmental Footprints and Eco-design of Products and Processes,

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Soggetti Sustainability

Forestry

Building materials

Environmental management

Polymers

Bioclimatology

Wood, fabric, and textiles Environmental Management Climate Change Ecology

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references.

Nota di contenuto Perspectives and challenges of world charcoal production in

technological, social, and climate change fields -- Wood-based materials for sustainable applications -- The volumetric sustainability of timber-based tropical forest management -- Insights About The Use Of Wood For The Generation Of Clean And Sustainable Energy In Thermoelectric Plants -- Bamboo-based medium density

particleboards: studying the different compositions of the core layer --

Potential Of Non-Wood Fibers As Sustainable Reinforcements For Polymeric Composites – A Review -- Forest-based polymeric

biocomposites: current development, challenges and emerging trends -- Changes in land use and occupation and their implications for the production chain of non-forest timber products from babassu (Attalea speciosa) in the cocais region, Maranhão state, Brazil -- Brazilian resin

method: Handmade, Sustainable and Profitable.-Plants that heal: The

sustainable exploitation of medicinal resources in Brazilian forests.

Sommario/riassunto

This book highlights the sustainability aspects of products and processes in forest science. The forest products sector supplies raw materials to several industrial sectors worldwide. These products can be classified as timber or non-timber products. Wood products are those that originate from the woody fraction and can include pulp, charcoal, firewood, and others. The non-timber products, on the other hand, have the products extracted from the different parts of the tree, such as bark, leaves, fruits, resins, oils, tannins, or even products extracted from non-woody biomass, such as palm heart or carnauba, among others. There are new studies and new products developed from forests worldwide each day. However, studies that evaluate the sustainability of these products and the processes related to their production are not so common. It is essential to highlight the sustainability aspects of these activities and the products obtained from them; such that steps can be taken to make the processes ecofriendly. Allied to ecological sustainability studies that evaluate the technical and economic feasibility of such activities arise. With this book, the authors through the approach of other products and processes of forest science, present the practical vision of aligning production with sustainability in an economically viable way. The book analyses different products and processes, ranging from technological production of engineered wood products to handcrafted resins with a high commercial appeal. With the expertise of different authors, who are researchers in various specific areas of forest sciences, this book helps expand research and presents new insights, assisting industry decision-makers and researchers working in the areas forest sciences.