

Pulp and Paper Industry

**(Pulp Mill, Paper Mill, Printing and
Writing Papers, Corrugating Medium
Paper, Newspapers Hardboards)**

Introduction

Pulp and paper are manufactured from raw materials containing cellulose fibers, generally wood, recycled paper, and agricultural residues. In developing countries, about 60% of cellulose fibers originate from non wood raw materials such as bagasse, cereal straw, bamboo, reeds, esparto grass, jute, flax, and sisal. The main steps in pulp and paper manufacturing are: Raw material preparation and handling, Pulp manufacturing, Pulp Washing and Screening, Chemical recovery, Bleaching, Stock Preparation, and Papermaking.

Pulp is a lignocellulosic fibrous material prepared by chemically or mechanically separating cellulose fibres from wood, fiber crops or waste paper. Paper is made by pulping wood, bleaching this pulp and then spreading it out into sheets to make it into paper.

Paper is a major product of the forestry industry, and is used widely in our society. Paper products are used not only in their obvious applications in the publishing industry and for writing on, but also in a variety of specialty papers, cardboards, brown papers etc. In addition, various chemicals are produced as a byproduct of the pulp and paper industry.

The use of paper for various purposes is an essential feature of the modern society. Therefore pulp and paper manufacturing is very important part of modern industry. Pulp and paper production is based on the use of bamboo as raw material, but also on the consumption of large-scale chemicals, like chlorine, sodium hydroxide, etc.

Bamboo is a fast-growing, evergreen plant belonging to the botanical family of grasses. It has long been used as a construction material and as a source of implements, weapons, and ornaments in several global regions, particularly in Asia. In these regions, bamboo pulp has also been used to make high-grade papers for many years. Bamboo-based paper also perpetuates the wood-based paper status quo because — unlike perennial agricultural fibers — it can be chipped in existing wood-based mills.

Globally paper Industry is one of the high priority industries having a bearing on the socio-economic development. In India too this industry plays a vital role in the overall industrial growth. Indian paper industry is one of the world's fastest growing industries.

The paper industry in India has become more promising as the domestic demand is on the rise. Increasing population and literacy rate, growth in GDP, improvement in manufacturing sector and lifestyle of individuals are expected to account for the growth in the paper industry of India.

The Indian Paper Industry has the top 15 Global players with an output of more than 6 millions tonnes annually with an estimated turnover of Rs. 150000 millions. Indian paper industry is riding on a strong demand and on an expanding mood to meet the projected demand of 8 million tonnes by 2010 & 12 million tonnes by 2020.

Some of the fundamentals of the book are bleaching of bamboo cold, high yield semi chemical pulping of mixture of bamboo and mixed hardwoods, sulphate semi chemical process, kraft green liquor semi chemical process, neutral sulphite semi chemical process, thermo mechanical pulps for newsprint, zeta potential concept in paper sizing, sodium carbonate in alkali extraction during bleaching bamboo , maintenance engineering in pulp and paper industry, design and application of refiners in stock preparation, paper machine effluent etc.

This book explains about the various raw material, their processing and utilizations and also the possible waste treatment of such paper and pulp making industry. To draw attention for manufacturing quality product with all possible latest technologies is the main purpose of this book. The book is very resourceful for new entrepreneurs, technocrats, existing units and research scholars.

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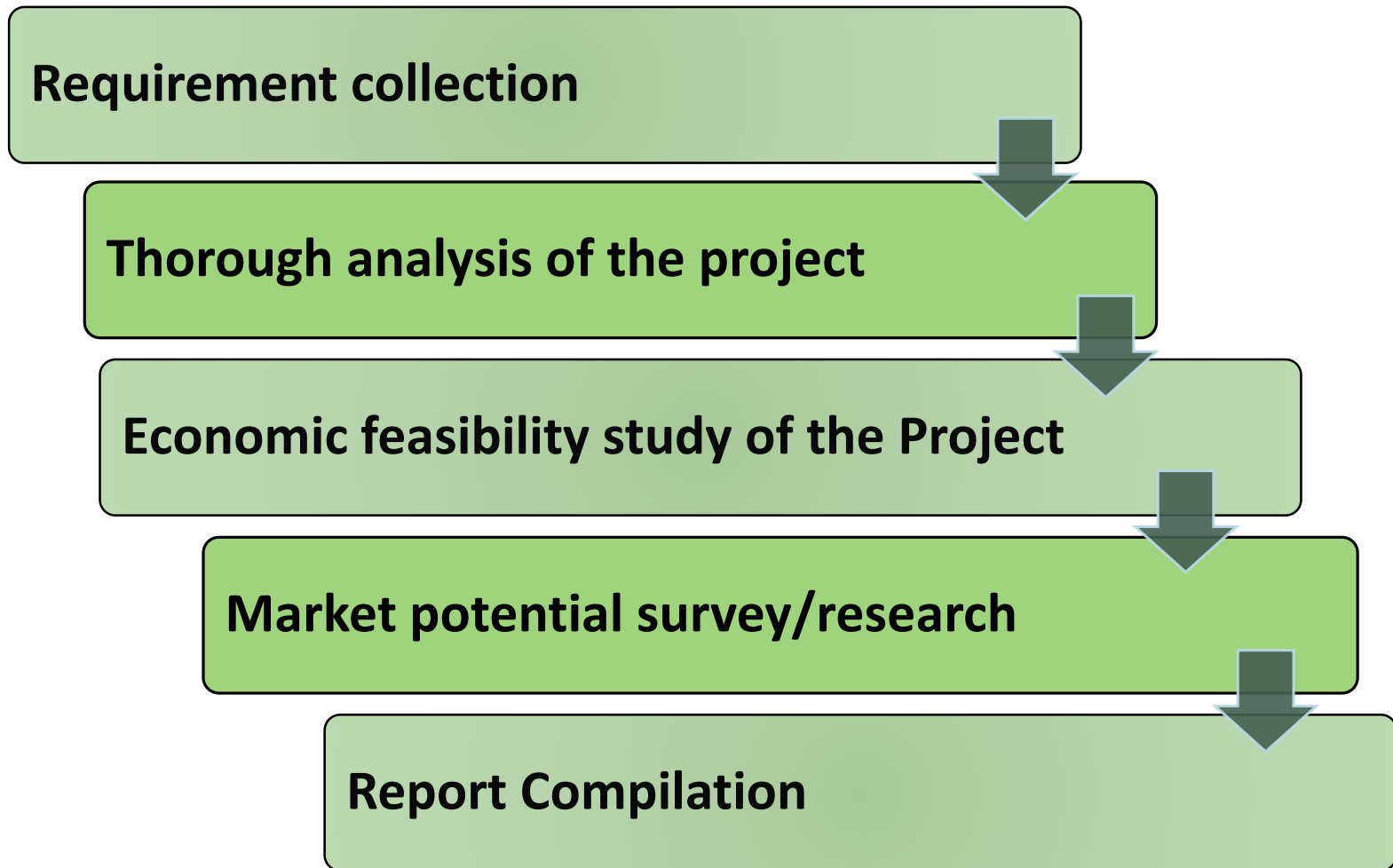
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- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

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