

Does Tree-Free Paper Can Make A Greener World? A Contemporary Study



Management

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THIYAGARAJ.V

Asst. Professor of Commerce, PG & Research Dept. Of Commerce, Chikkanna Government College, Tiruppur, India

ABSTRACT

Treeless paper is a reality. Treeless paper is just one solution that will help people reduce their carbon footprint. Green 100% Treeless Paper Products in India are made from sugar cane husk and bamboo grasses both renewable resources. No trees were harmed while making these products. Treeless paper Greenpaper products are competitively priced. Treeless paper Greenpaper products are whitened with Hydrogen Peroxide – a safe and natural alternative to bleach. Bamboo grass is another renewable resource that can be harvested for the production of treeless paper. Treeless paper products are 100% Treeless and made from sugar cane husk and bamboo grass two environmentally sustainable recycled resources. The most urgent being the deforestation of our natural resources.

INTRODUCTION

Papermaking has traditionally been traced to China when Cai-Lun, an official attached to the Imperial court during the Han Dynasty (202 BC-AD 220), created a sheet of paper using mulberry and other bast fibers along with fishnets, old rags, and hemp waste.[6] though the earliest piece of paper found, at Fangmatan in Gansu province inscribed with a map, dates from 179-41 BC.[7] Papermaking is made in Kashgar. The first use of paper has been excavated in China dating to the reign of Emperor Wu of Han from the 2nd century BC, used for purposes of wrapping or padding protection for delicate bronze mirrors.

Paper manufacturing is highly competitive, with historically tight margins and small operating profits. As a result, the raw materials used to make paper have to be very cost effective, using cheap, scalable renewable resources, coupled with relatively inexpensive ways to deliver large quantities to market. Until recently commercial tree farming, has been shaped to account for the tight operating margins and supply cost limitations. Virtually all paper, however, requires massive cutting, replanting and re-cutting of wide swaths of forest. These limitations have made wood pulped farm grown supply stock the paper industry's overwhelming scalable raw material of choice.

The paper industry's answer to "tree free" paper has been focused on "recycled waste paper" as a tree free alternative even though the vast majority of "recycled waste paper" originally started its life cycle from tree grown pulp.

Tree-free paper or tree-free newsprint describes an alternative to wood-pulp paper by its raw material composition. It is claimed to be more eco-friendly considering the product's entire life cycle.

SOURCES OF FIBER FOR TREE-FREE PAPER

- Agricultural residues (i.e. sugarcane bagasse, husks and straw)
- Fiber crops and wild plants, such as bamboo, kenaf, hemp, jute, and flax
- Textiles and cordage wastes

Certainly the issue of sustainability comes into play when debating harvesting timber from the forest or mining minerals from the ground. Whether a particular paper is made entirely from minerals, the larger picture is that the entire paper industry is ever increasingly utilizing mineral additives in paper production.

The question we have to ask is, *"Do we cut more trees or dig more earth or can we minimize both?"* Quickly we come back to the issue of sustainability. Choosing treeless is easy with Green paper products. No trees were harmed while making these products. United States annual pulp paper goods consumption exceeds 110,000,000 tons per year consuming 1 billion trees

annually, an area of approximately 12,400 square miles; US demand for paper is increasing notwithstanding the advent of the "digital age".

DOES TREELESS PAPER CAN MAKE A GREENER WORLD?

Treeless paper is a reality. It is a reality that everyone can be a part of both for businesses and households. Treeless paper is just one solution that will help people reduce their carbon footprint. It is a product that will provide future generations the beauty of natural forests and habitats for centuries to come.

- Each year over 900 million trees are harvested for paper alone. Trees can take up to 30 years to grow
- Treeless paper products are 100% Treeless and made from sugar cane husk and bamboo grass two environmentally sustainable recycled resources

Treeless paper Green paper products are competitively priced **Treeless paper Green** bath tissues are soft, absorbent and septic safe

Treeless paper Green paper products are Whitened with Hydrogen Peroxide – a safe and natural alternative to bleach

Treeless paper Green 100% treeless paper products are a breakthrough in sustainability with a positive impact on Earth without sacrificing quality.

• Sugar cane:

Husks are the agricultural waste after sugar is processed which in the past was burned. It is now used to make **Green** treeless paper products

Sugar cane renews itself in as little as 12 months

The largest agricultural crop based on production (in tonnes) in the world

Bamboo grass can grow as much as three inches in one day.

Virgin sugar cane and bamboo pulp is comparable to freshly harvested tree pulp and is softer than recycled paper.

Nearly 80% of the world's sugar cane is produced in Brazil, India and China. China currently has the best infrastructure to process treeless paper products.

100% Treeless Paper Products

- Bath Tissue
- Facial Tissue
- Paper Towels
- Napkins
- Plates

- Bowls
- Copy Paper
- Notebook Filler Paper
- Jumbo Roll Bath Tissue and
- Multi-Fold Paper Towels

DO PRICE IS AFFORDABLE TO GREEN PRODUCTS?

The most urgent being the deforestation of our natural resources. Green100% treeless paper products are a breakthrough in sustainability with a positive impact on earth without sacrificing quality. Green100% treeless paper products are a favorite among consumers and businesses who care for the environment and want to live responsibly. Every day we lose rare tree species and habitats for wildlife. We need to consider where the material that makes our paper comes from at once.

RAW MATERIALS FOR GREEN TREELESS PAPER PRODUCTION

Green products are made from two renewable and sustainable resources. These two resources are sugar cane husk and bamboo grass. Sugar cane is the largest agricultural crop in the world. As

it is developed for what we call sugar, it also produces a byproduct called bagasse. When sugar cane is crushed, the bagasse is extracted and can be used for bio energy or as a pulp for paper products. Sugar cane can grow back to its original height in as little as 12 months. Bamboo grass is another renewable resource that can be harvested for the production of treeless paper. Bamboo grass can grow up to three inches in one day. It can regenerate to its full growth in as little as six months.

NEWLY DEVELOPED TREE FREE PRODUCTS

Developing tree free papers takes ingenuity and passion. In addition to some of the above-mentioned leaders in tree free paper such as Vision Paper Co. and Living Tree Paper Co., Al Wong of **Arbokem** has been one of those rare people in the paper industry who has strived to

Change the paradigm that paper needs to be made from trees. Currently, Arbokem is working to reintroduce its tree free paper production under the brand name Xativa. Status of printing paper production can be made via inquiry to Arbokem.

Table.1 showing the process difference between traditional and treeless paper making

PROCESS	TRADITIONAL PAPER	TREE LESS PAPER
Raw Material	95% wood pulp, small % of other plant fibers.	High proportion of mineral powder and low proportion of non-toxic resin.
Production Process	Causes pollution – Excessive use of water, chemicals and bleaching agents.	No Pollution – No water added during processing.
Product Position	Mass produced and integrated into the culture; it has yet to satisfy all users.	It is the next generation of paper in the paper industry.
Printing Suitability	Overall quite good.	Printing ink dries on treeless paper at a faster rate than on synthetic paper.
Further Processing Suitability	Undoubtedly further processing is not a problem as processing machines were made with the traditional paper in mind.	After coating it is very similar to traditional paper. Moreover, in many aspects it outperforms traditional paper.

SAVING TREES

Choose to help fight deforestation by using a product that breaks away from using Earth's precious finite resources. Choose to use a product that is part of the solution. The quest to save trees and eliminate the use of forest fiber for paper production has reached further than just a return to the past. Paper was originally produced from plant fiber, the recovery and use of cotton and linen rags, as well as the recycling of old paper. But newer innovations in producing printable substrate in the past few years have been brought to our attention here at Conservatree. While these papers are not currently on our listing of environmental papers, we will discuss them here because the term "tree free paper" has been applied to these products. When we

Choose treeless we choose to give back to the environment that has helped us grow.

SUGGESTIONS TO GO TREE- FREE

- Eco Products provides an environmentally sustainable plan
- Is to think about the environment and how we can protect it for generations to come.
- make a personal as well as a business commitment to try and use products made from renewable resources whenever possible
- Allowing future generations to share in a greener tomorrow.
- two resources are sugar cane husk and bamboo grass and the two are fortunately renewable and sustainable resources
- Choose treeless we choose to give back to the environment that has helped us grow.
- it's easy to take nature for granted, the earth's resources require care and good usage
- No trees were harmed while making these products.

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