

bluecat paper™

tree-free paper

Who we are and what we do



- Since 2018 we have been creating 100% TREE- FREE PAPER in the most sustainable way possible
- Linen rags, banana stump fibre, elephant dung, coconut husk are just some of the high cellulose raw materials we use to make paper
- We RECYCLE WASTE by-products for many industries silk, beer ,coffee, tea etc and use invasive species, for example, water hyacinth from lakes to make the local ecosystem more habitable
- We provide EMPLOYMENT to women and the local area with a safe environment to work
- We have aligned ourselves with the SDG goals set by the United nations
- We RESEARCH Paper making in alternate fibers and AID in climate conservation



We have a track record & our success is being recognized in the industry

- [Indian Express Indulge](#)
- [The Better India](#)
- [Kodava Clan](#)
- [The New Indian Express](#)
- [Daily Hunt](#)
- [The Better India](#)
- [Udayavani](#)
- [Diggaj Media](#)
- [Crunch Stories](#)
- [The Hindu](#)
- [Goodnet](#)
- [The Better India](#)
- [Goingtoschool.com](#)
- [Indian Express Indulge](#)
- [Everything Experiential](#)
- [Deccan Herald](#)
- [The New Indian Express](#)
- [Yourstory.com](#)
- [Dighvijay News](#)
- [Bangalore Mirror](#)
- [Architecture Update](#)
- [Yourstory.com](#)

PRESS & MEDIA LINKS



anand mahindra @anandmahindra

Leadership in the 'circular economy.' Not just trees she's saving but her process conserves water too. Which is why I'm posting this on [#WorldWaterDay](#) Given our population we can help our organic brands achieve global scale & success. Let's all choose her brand & her products.

The Better India @thebetterindia · Mar 22

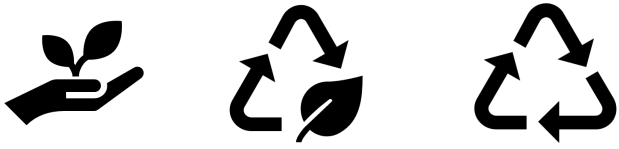
Kavya Madappa: Making 100% Tree-Free Paper Mainstream

You've heard of plant-based meat – now get ready for tree-free paper. Meet Kavya Madappa of Bluecat Paper whose eco-friendly paper is exported to 30 countries. #SustainableStartup #Women Entrepreneurs @anandmahindra @hvgoenka

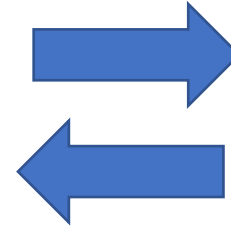
1:21 PM · Mar 23, 2022 · Twitter for iPhone

325 Retweets 11 Quote Tweets 2,221 Likes





**SUSTAINABLE
DEVELOPMENT
GOALS**



bluecat paper™

BLUECATPAPER aligns itself with **SDG** to transform the World !

Sustainable development goals adopted by all **United Nations Member States** in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future.

At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

At Bluecatpaper, We Research and ECO-innovate in order to ,provide alternate sources to Tree paper . We RECYCLE. UPCYCLE , REDUCE and RESUSE .

IN addition ,we alos provide employment and trained unskilled workers into skilled paper makers. We create employment and encourage people to upcycle Agro waste and prevent burning. These processes have in turn helped Save water, Conserve trees by recycling and up-cyling waste and in turn reduce landfill waste and conserve forests .

DETAILED REPORT BELOW

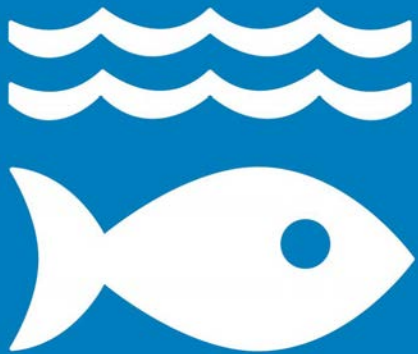


SUSTAINABLE
DEVELOPMENT
GOALS



bluecat paper™

14 LIFE
BELOW WATER



8 DECENT WORK AND
ECONOMIC GROWTH



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



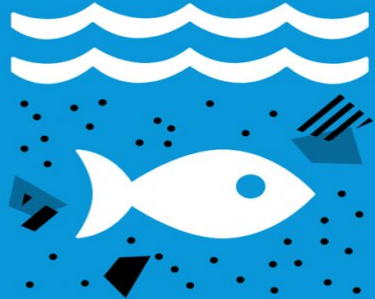
BLUECATPAPER aligns itself
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to transform the World !



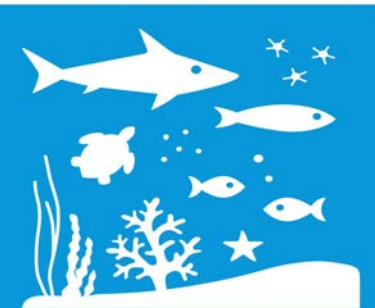
14 LIFE BELOW WATER



TARGET 14.1





TARGET 14.2







Water hyacinth is an aquatic plant that has become an invasive species in many areas, and its presence can have a negative effect on many of the UN Sustainable Development Goals (SDGs).



- The water hyacinth has been linked to a reduction in the availability of clean water, which is essential for sustainable development. This can lead to a decrease in access to safe drinking water and sanitation, two of the SDGs. It can also reduce the availability of water for agricultural purposes, which can lead to decreased food security and nutrition, another of the SDGs.
- The water hyacinth infestation can also lead to a decrease in biodiversity, which negatively impacts the SDG for Life Below Water. Other SDGs that are affected include those for Climate Action, Sustainable Cities and Communities, and Responsible Consumption and Production.
- Overall, the presence of water hyacinth can have a significant negative impact on many of the SDGs, and it is essential that effective strategies are put in place to control and manage the species in order to protect the environment and promote sustainable development.





SDG (goal)	Indicator	How Blue Cat paper contributes	Metrics
 <p>14 LIFE BELOW WATER</p>  <p>bluecat paper™</p>	<p>14.2 PROTECT AND RESTORE ECOSYSTEMS By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.</p> <p>14.1 REDUCE MARINE POLLUTION By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.</p>	<ul style="list-style-type: none"> Bluecat paper undertakes the responsibility to conserve and sustainably use biodiversity to support the ecosystem to rejuvenate itself and to remove WATER HYACINTH from lakes and help save fish and livelihood of Fishermen <ul style="list-style-type: none"> Bluecat paper will harvest Water hyacinth responsibly as it is a very fast growing weed and also contributes to cleaning and purifying water controlled harvesting makes Hyacinth both a proper resource for alternate fibers for paper making as well as keeping water clean in Lakes <ul style="list-style-type: none"> Setting of collection centres where the hyacinth can be cleaned and sent to the factory for beginning the process of paper making In addition, it Conducts educational camps and spreads awareness programs through social media and promotes tree-free paper by educating people to <ol style="list-style-type: none"> Consume less paper To use alternate sources of paper To choose sustainable paper 4.to understand alternate fibers of paper making 	<ul style="list-style-type: none"> Saved over 80000 trees Experimented with water hyacinth for a period of 3 months and learnt that it is possible to make strong and resilient paper from this highly invasive species Recycling of 35000 litres of water every day and help conserve water which is a scarce resource cleaned 2 lakes in bangalore with the help of the Bangalore civic authorities and Fisheries department of Karnataka Introduced state of art water effluent treatment plant(ETP) to ensure that water is clean and paper friendly

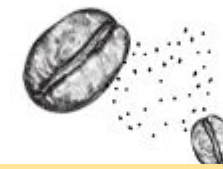
SDG (goal)	Indicator	How Blue Cat paper contributes	Metrics
 <p>15 LIFE ON LAND</p>  <p>bluecat paper</p>	<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements</p> <p>15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally</p> <p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p> <p>15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species</p>	<ul style="list-style-type: none"> • Trees are an expensive source of raw material for paper. • Trees take over 8-10 years to grow. During this period there is an ecosystem that evolves within. • When over 50000 hectares of trees are cut down for paper, this causes massive damage to our already fragile ecosystem. • Planting trees elsewhere is NOT the answer to this random cutting down of trees. Therefore, Bluecatpaper has been effectively working on ways to use alternate sources to make paper and thereby saving trees • As paper is a cheap and ubiquitous commodity for us humans, we fail to realize how expensive this is for the planet earth • Bluecatpaper undertakes the responsibility to conserve and sustainably use biodiversity to support the ecosystem to rejuvenate itself • In addition, it Conducts educational camps and spreads awareness programs through social media and promotes tree-free paper by educating people to <ol style="list-style-type: none"> 1. Consume less paper 2. To use alternate sources of paper 3. To choose sustainable paper 	<ul style="list-style-type: none"> • introduced seed paper that enables seeds to be planted once the paper is discarded • Experimented with spent barley, coffee husk, tea husk, banana and other fibers for a period of 2- 4 months and learnt that it is possible to make strong and resilient paper from this rich cellulosic agro waste • Recycling of 35000 litres of water every day and help conserve water which is a scarce resource • Introduced state of art water effluent treatment plant(ETP) to ensure that water is clean and paper friendly • Stopped farmers from burning over 100000 kilos of lemongrass by educating them and turning this residual waste into paper

SDG (goal)	Indicator	How Blue Cat paper contributes	Metrics
<p data-bbox="107 325 461 458">12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>   <p data-bbox="150 1186 438 1225">bluecat paper™</p>	<p data-bbox="499 301 1014 468">12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p>	<ul data-bbox="1039 301 1832 1136" style="list-style-type: none"> • Bluecatpaper goals • High priority to achieve sustainable management and efficient use of natural resources. • Recycle water. • Save trees. Reduce cellulose-rich waste. Conserve lakes and water bodies. Efficient use of disposal of agro by products • innovation and technology that can make tree-free paper cheaper and accessible to all at low prices • Packaging. Gift wrapping and notebooks consume over 3 billion trees a year. • consumption and production • Bluecatpaper creates awareness programs for children by conducting tree-free papermaking workshops and advising the necessity to make sustainable choices. • Bluecatpaper aims to Promote public procurement practices that are sustainable, in accordance with national policies and priorities 	<ul data-bbox="1839 301 2456 915" style="list-style-type: none"> • Saves over 35000 litres of water by recycling water back into production. • Reduced over 200000 kgs of textile and agricultural waste • Lack of use of chemicals ensures that decomposition of tree paper is very fast (3 weeks) in landfills as against 2 years with paper made from trees • Saved over 7000 kgs of coffee husk from being dumped in rivers and lakes by turning it into paper <ul data-bbox="1862 791 2456 915" style="list-style-type: none"> • Bluecataper constantly endeavors to reuse waste and upcycle it into paper

SDG (goal)	Indicator	How Blue Cat paper contributes	Metrics
<p data-bbox="163 331 519 419">8 DECENT WORK AND ECONOMIC GROWTH</p>   <p data-bbox="198 1208 494 1248">bluecat paper™</p>	<p data-bbox="555 302 978 482">8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training</p>	<ul data-bbox="1044 302 1793 1239" style="list-style-type: none"> • Helps achieve higher levels of economic productivity through diversification, by employing people and labour across all religions and shows no gender discrimination. • Focuses on high value-added and labor-intensive sectors, • Enables training and promotes workers from unskilled to skilled • Promotes development-oriented policies that support productive and active decent job creation • Bluecatpaper is part of MSME entrepreneurship, (micro-, small- and medium-sized) and through its creativity and innovation, has encouraged the formalization and growth of its team and contributed to the economic growth of India • Encourages and promotes employment to farmers by monetising residual waste sourcing and collection 	<ul data-bbox="1803 302 2405 1096" style="list-style-type: none"> • Employment of over 35 women and men who are trained paper makers. • We undertake training programs every 3 months by designers and scientists to enable their skills to make world-class paper products • Over 45 farmers and coffee estate planters are recruited and educated to supply residual waste for papermaking • Education drives to create awareness of not burning residual farm waste are undertaken once every 3 months • 25 textile workers are additionally paid to sort out textile waste as per colour codes

SDG (goal)	Indicator	How Blue Cat paper contributes	Metrics
<p data-bbox="163 289 410 379">4 QUALITY EDUCATION</p>   <p data-bbox="206 1196 499 1236">bluecat paper™</p>	<p data-bbox="563 268 1016 544">4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development</p>	<ul data-bbox="1021 268 1793 1165" style="list-style-type: none"> • We support the emancipation of women and empower them by placing them in supervisory roles and supporting gender equality. • No discrimination is tolerated based on caste, creed, religion, and gender • Educating children and conducting regular workshops on the benefits of tree-free paper • Training programs on recycling waste and making paper was own consumption in homes • Encouraging factory visits to see the tree-free paper process • , Kavya Madappa , founder is a champion for women and their sustainable development betterment. • Bluecatpaper ensures women’s full and effective participation and equal opportunities for leadership at all levels of decision making in both the production and manufacturing of paper and products • Conducting webinars in colleges on waste management techniques. • Kavya Madappa is also an active member of FICCI FLO which is the Women’s wing of the Federation of the Indian chamber of commerce and industry. 	<ul data-bbox="1798 268 2410 793" style="list-style-type: none"> • Employment of 35 men and women • 12 Training programs undertaken for children • Employment for staff from various cultural diversities and religion • 3 webinars were conducted for interns from PES RSN college of arts and science on waste management, Dayanand Sagar institute of education etc • Celebration of festivals such as ID Milad, Christmas, and Diwali by distributing sweets and promoting multicultural harmony

Zero-Waste Management Success



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	Residual waste	Source Material	Benefits
1	Cotton rag waste	Cut pieces from waste t shirts and bed sheets	Saves trees and reduces landfill waste
2	Rice Stubble	the uncut portion of the rice straw after harvest	Stubble burning is a significant source of (CO2), volatile organic compounds (VOCs), nitrogen oxides and hydrocarbons accounting for about 10% of the total emissions in the world. Prevents burning the residual waste, controls air pollution
3	Lemon grass	Residual waste after producing lemongrass oil	Prevents burning the residual waste, controls air pollution
4	WATER HYACINTH	Water hyacinth – the most invasive species in the Bengaluru lakes	Monetize removal of water hyacinth from lakes. Create sustainable gift wrap and packaging materials. Create employment and collection centers
5	Mulberry paper -	From barks and sticks of mulberry bushes that feed the silk worms (sericulture)	Saves trees, reduces landfill waste prevents burning of mulberry sticks that cause pollution. Paper can be used for origami and creating lights
6	Barley paper	Spent barley from beer brewing companies	Barley paper can be used for packaging , coasters, table mats and notebooks. Saves trees and reduce chemical usage in paper making
7	Banana	Residual from the banana stump after chopping banana plants	Environmentally-conscious paper, helps prevent excessive pollution of the ecosystems rivers and forests. Paper is versatile and is used for journal making to light fixtures
8	Hemp	Residual waste from hemp fiber after producing yarn	Slows deforestation, more durable than wood paper. Paper is very strong and is perfect for eco friendly and sustainable packaging
9	Elephant poo	Rich in fiber and picked from sanctuaries	Production does not require cutting of trees or harmful chemicals, used as journal covers, wedding invitation. Paper is 100% sustainable and free of chemicals . easily decomposes
10	Corn husk	Waste from discarded corn	Textured paper . paper for wedding cards and wrapping paper
11	Tea and coffee husk	Residual agro waste after pulping of seeds and tea leaves	Natural paper . recycles tons of tea and coffee waste



Water hyacinth is one of the most invasive species in lakes and water bodies - A CASE STUDY



MEHR NEWSAGENCY
Photo: Pouya Bazargard

We have experimented with water hyacinth and discovered that this cellulose rich fiber can make strong resilient paper.



This paper is used for bags, gift wrapping, lights, notebooks and other products



Water hyacinth creates dense mats of biomass on the water surface which reduces light to submerged vegetation and can cause oxygen depletion and kills fish

It causes an imbalance in the aquatic micro-ecosystem.
It is now considered a serious threat to biodiversity

HISTORY OF WATER HYACINTH IN INDIA

Water Hyacinth (*Eichhornia crassipes*) is a free-floating perennial aquatic plant, native to the Amazon basin in South America. This plant has beautiful, large, purple flowers.

However, its beauty is only surface deep, since it has a bad reputation of being one of the worst aquatic weeds in the world. Common Known names are the “German weed” in Bangladesh, the “Florida Devil” in South Africa, the “Terror of Bengal” in India and the “Japanese Trouble” in Sri Lanka,

the plant grows extremely fast - it can double its population in a matter of two weeks.

The Water Hyacinth was a gift of the British to India, introduced towards the end of the 18th century. Lady Hastings, the wife of the First British Governor-General, who was enchanted by the beauty of the flowers, brought it to India, which has now spread to most water bodies

The plant also destroys natural wetlands and causes flooding by blocking rivers and canals, and is a severe menace in flooded rice fields, where it reduces the yield considerably.



Menace of Water hyacinth and how Bluecatpaper can help !

- WATER hyacinth can produce large mats that can trap fish and other aquatic life underneath
- THIS can result in death of fishes as well as hurt the livelihood of many fishermen
- THE lakes are no longer habitable
- WE help make water clean for consumption
- Bluecat paper can help reduce this menace and turn the dreaded weed into sustainable paper thereby saving trees
- WE can be a part of SDG goals NO.14 by Saving LIFE IN WATER



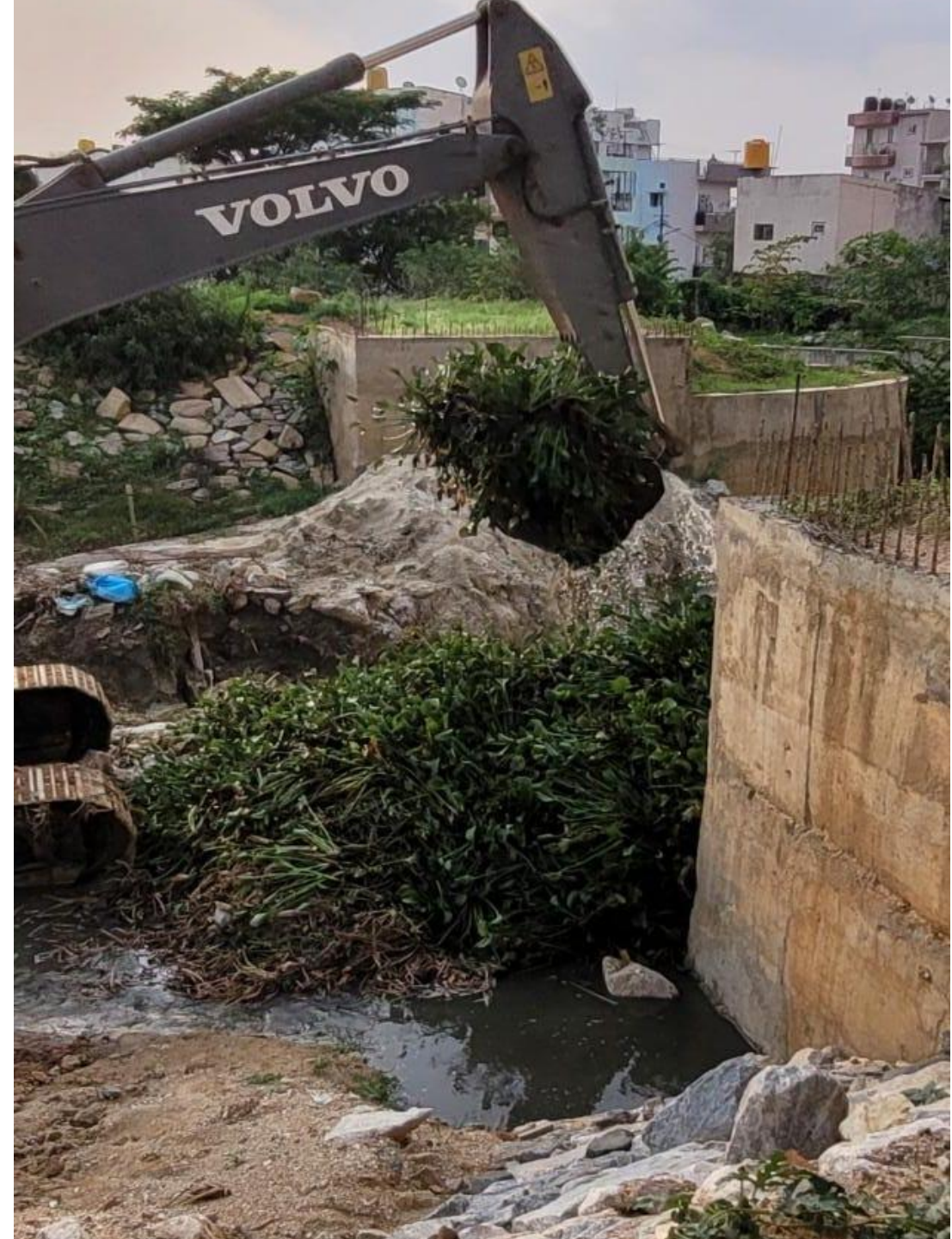
Dredging of water hyacinth to clean lakes

- Dredging of water hyacinth to clean lakes in bangalore
- Consultation with the Fisheries department to understand how to dredge the lakes to save fishes
- Organising the removal and loading it on the trucks to send ot to the facility
- Ensuring minimum damage to the lakes and the hyacinth stems



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tree-free paper



Removal of water hyacinth

- Water hyacinth after removal should be cleaned off the dirty roots and mud
- This is necessary as its only the stem that is high in cellulose
- Cellulose content is almost 90% in the stems
- this is a Labour Intensive job and can help in employment



Preparing for paper making

- Water hyacinth stems once cut and cleaned must be cooked
- the stems need to be chopped to 2-3 inches for easy and quick cooking
- After cooking the stems must be washed
- Thereafter the beating and pulping process begin for turning water hyacinth in good quality TREE- FREE paper





Conversion process and upcycling methods of Water Hyacinth



- The processes involved for water hyacinth are as follows
- Cleaning and removal of mud, sludge roots and leaves.
- Cutting of the stems into 3 - 4-inch pieces
- Cooking with soda ash to remove lignin
- This followed with rinsing
- Beating into pulp
- Paper making .
- Fillers such as cotton rags, linter and flax were added to strengthen the paper naturally

Water hyacinth makes strong resultant paper that can be used as the following

1. Gift wrap 2. Carry bags 3. Wine bags. 4. notebooks 5. Table ware such as mats and coasters etc 6. Cards and envelopes. 7. Stationery





Hulimavu Lake Restoration Efforts and Success !!!

- The focus of the restoration is to safeguard the lake biodiversity and increase the potential for groundwater recharge,
- The members of the Hulimavu kere Taranga began taking matters in their own hands to clean up the lake . The lake consists of the dreaded invasive species water hyacinth.
- The members of the HKT worked very hard and enabled the collection and packaging of the water hyacinth in an effort towards cleaning the lake
- Bluecatpaper was contacted and we arranged for the water hyacinth to reach our location in Peenya industrial estate.



Rice Stubble burning: A problem for the environment, agriculture and humans – A CASE STUDY in CLEAN AIR



Burning crop residue is a crime under Section 188 of the IPC and under the Air and Pollution Control Act of 1981.

Rice stubble is rich in cellulose and can be converted into strong paper that is Tree free .

A study estimates that crop residue burning released 149.24 million tonnes of carbon dioxide (CO₂), over 9 million tonnes of carbon monoxide (CO), 0.25 million tonnes of oxides of sulphur (SOX), 1.28 million tonnes of particulate matter and 0.07 million tonnes of black carbon. These directly contribute to environmental pollution, and are also responsible for the haze in Delhi and melting of Himalayan glaciers.

We have experimented with rice stubble and discovered that this cellulose rich fiber can make strong resilient paper.



This paper is used for bags, gift wrapping, lights, notebooks and other products



Rice Stubble makes strong resultant paper that can be used as the following

1. Gift wrap 2. Carry bags 3. Wine bags. 4. notebooks 5. Table ware such as mats and coasters 6. Cards and envelopes. 7. Stationery



How we transform OTHER residual waste into sustainable paper and products through Research and Innovation



Elephant Dung



Corn Husk



Coconut Coir



Banana Stumps



SAVE TREES



At Bluecat Paper our main goals are to:

1. Save trees
2. Save water
3. Research and add more alternate fibers into our portfolio through innovation
3. Encourage employment and skilling, especially for women from backward societies.
4. Repurpose waste from other industries
5. Introduce circularity
6. Preserve natural resources
7. Make tree-free paper mainstream



UPCYCLE



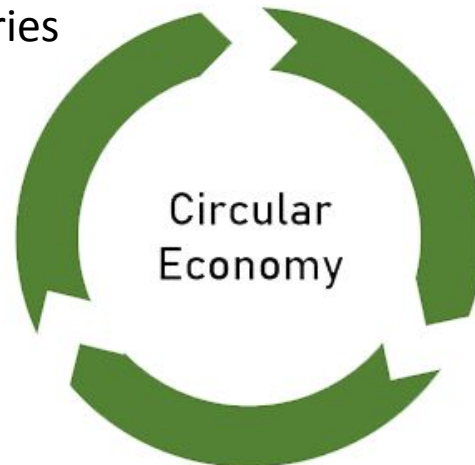
SAVE
WATER



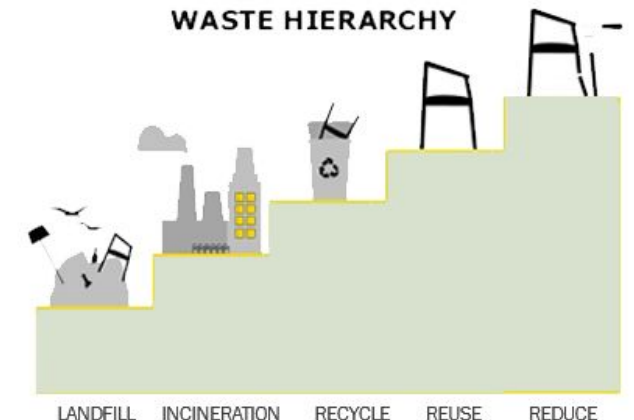
REDUCE
CARBON FOOTPRINT

Objective:

Scale up operations in order to achieve saving 1000000 trees, recycling and upcycling 1500 tons p.a of residual waste and to provide employment to over 200 people



WASTE HIERARCHY



Why should we innovate and Scale up ?

ECO- INNOVATIONS plays a key role in improving impact and saving more trees

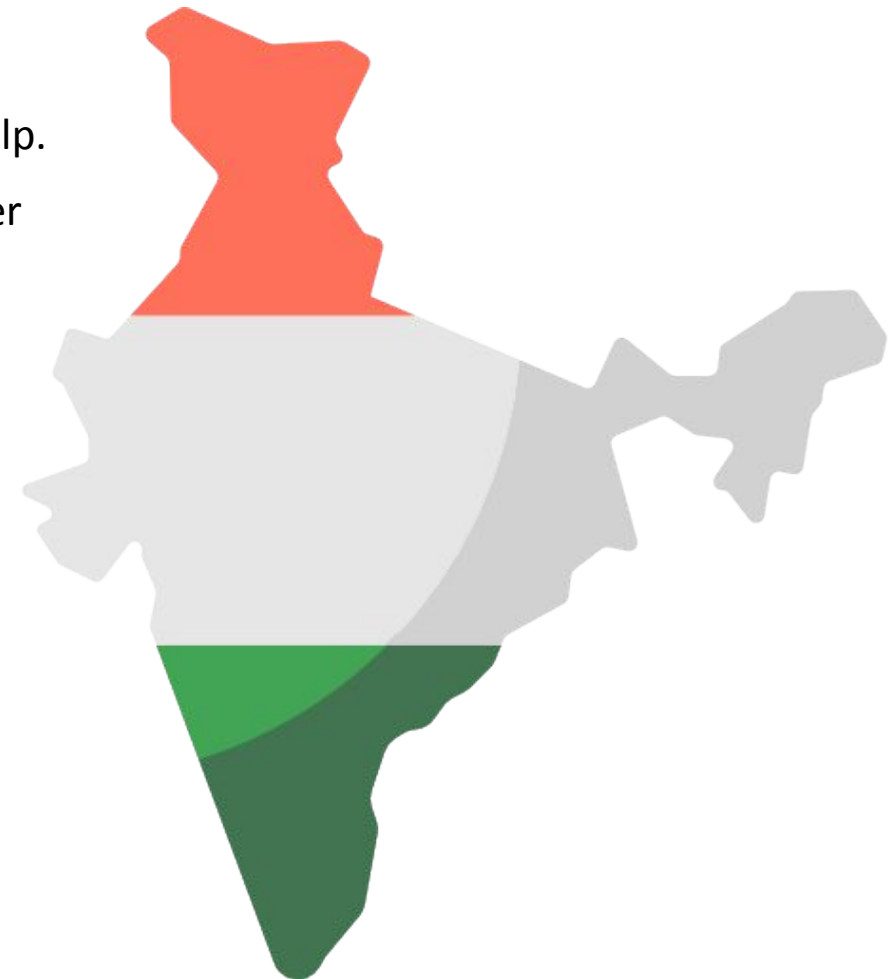
- **Introducing** new cellulosic rich residual waste such as corn husk, spent barley, tea/ coffee husk and even elephant poo and cow dung paper into the portfolio of Tree-Free paper along with cotton rag, lemon grass, line, flax, bagasse and hemp.
- **Increasing** customer satisfaction, upgrading with new machinery to reduce costs and make the paper more cost effective and attract higher market share.
- **Adding packaging** and entering mass markets instead of remaining in the handmade niche space in order to reduce the harmful effects of traditional papermaking.
- **Forming** effective SUPPLY CHAIN systems to increase ease of working with farmers, fishermen and textile companies in order to ensure that production demands are met with ease.
- **Manufacturing** paper in ROLL forms so as to enable large-scale production and provide varied options in packaging to customers' requirements of sustainable paper.
- **Introducing** novelty to existing product lines or processes, leading to increased market share, revenue, and customer satisfaction.
- **Innovation** is used to upgrade the operating systems of the business or to introduce modern technologies for automation.



Importance and Urgency of Scaling up

INDIA as a country has tons of residual agro and textile waste that can be converted into paper

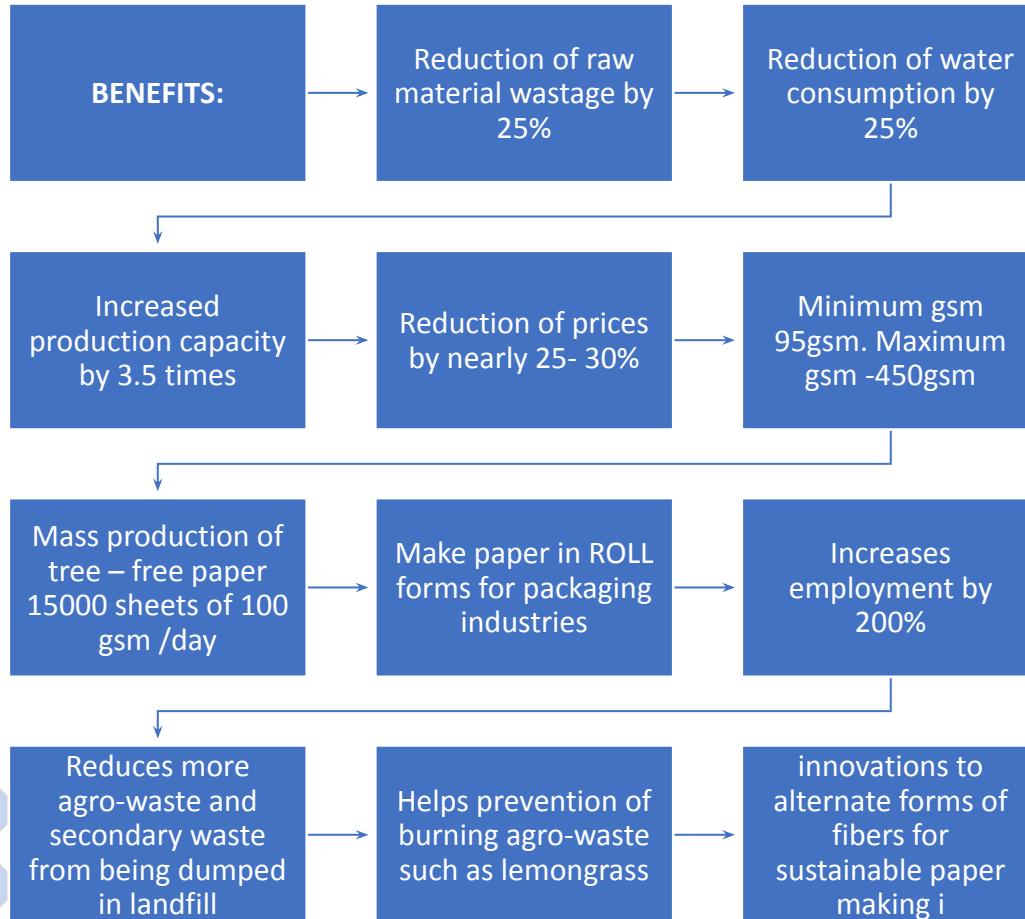
1. **Utilize** waste management systems to separate and collect the agricultural and textile waste.
2. **Invest** in state-of-the-art equipment to process the waste into usable Tree-Free pulp.
3. **Invest** in the latest technology to turn the alternate pulp into sheets / rolls of paper
4. **Utilize** renewable energy sources to power the process.
5. **Educate** the public about the benefits of using Tree-Free paper.
6. **Set up** a network of waste collection centers in urban & rural areas.
7. **Develop** strong partnerships with textile manufacturers to collect their waste.
8. **Encourage** businesses and individuals to switch to Tree-Free paper.
9. **Create** a national database to track the amount of waste being upcycled.
10. **Establish** a regulatory framework to ensure that the process is done in an environmentally responsible way.



Paper Making Machine INNOVATIONS for upcycling waste



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New TREE- Free products owing to Scaling up and innovations of Bluecatpaper

❖ Paper packaging Industry is growing @of 25% per annum Paper bags and Gift wraps consume more than 50 million trees every year, Packaging Require paper to be in Rolls . so innovating handmade paper into ROLL form is a Strategic scale up plan to create greater impact.

❖ In the U.S., over 10 billion paper bags are consumed each year, requiring the felling of 14 million trees.30-Apr-2020

❖ Regular paper bags have a higher carbon footprint than tree free paper bags, Tree Free paper bags are stronger and more durable, they use less chemicals and are therefore more easily decomposable in landfills.

❖ Hang tags and price tags are projected to constitute a market share of US\$2.8bn by 2031

❖ Bluecat Paper can provide tree-free substitutes using residual agro and textile waste such as bagasse, cotton, denim, water hyacinth, jute, and linen and cause great impact in conserving and saving trees.



Bags



Hang Tags



Gusset Bags



Soap Boxes



Bulk Cargo Boxes



Corrugated Pads



Easy-Fold Mailers



32 ECT Lightweight Boxes



Multi-Depth Boxes



Storage File Boxes



Moving Boxes and Supplies



Side Loader Boxes



Hazmat Boxes



Wine Shippers



Insulated Shippers and Supplies



Phone boxes

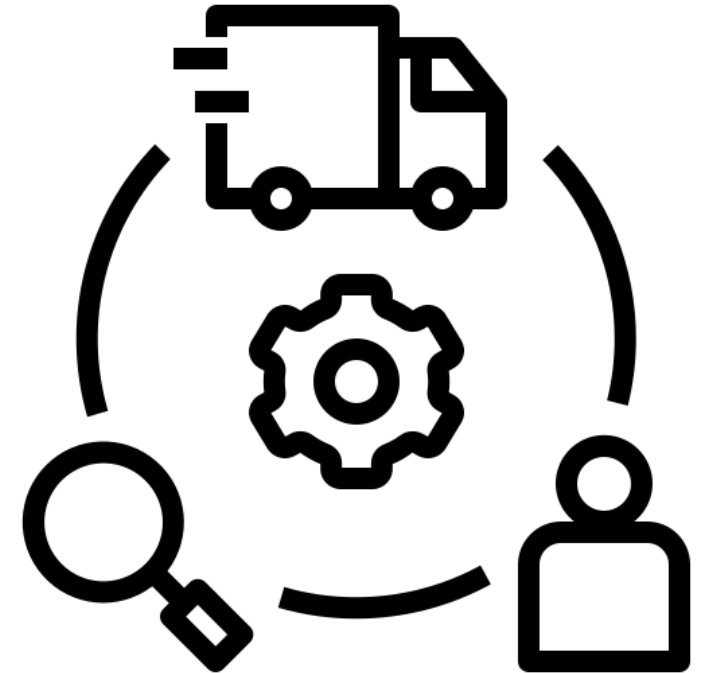
Supply-chain management of Residual agro and textile waste for sustaining scaling up of operations and market demand

- **Supply chain management is important as it ensures:**
- **Achieve** several business objectives.
- **Controls** manufacturing processes
- **Improves** product quality
- **Assists** in timely procurement of raw materials to ensure the delivery of the product at its final destination.
- **Supply planning** determines how best to fulfill the requirements created from the demand plan.
- Circular economy systems can be introduced

India is a country that has large volumes of both AGRO and TEXTILE production that results in residual waste.

Below are a few examples of fibers and their availability to ensure proper management of resources to meet Market demand

1. Lemon Grass
2. Bagasse
3. Cotton and jute
4. Hemp.



Lemongrass

- 80% of the world's supply of Lemon grass comes from India, and is harvested 3-5 times a year.
- Around 500-600 metric tonnes of lemongrass waste residue is available, which can be converted into strong paper with 2-3 chemicals.

Benefits and advantages of using lemongrass-based paper include:

- Replacing packaging paper and stationery items such as gift wrapping paper and books.
- Reducing burning of waste and educating farmers.
- Easy decomposition due to lack of large quantity of chemicals.
- Quicker water recycling back into production, making it more energy efficient and reducing carbon footprint.
- Incentivizing farmers and helping their livelihoods.
- Promoting conservation solutions through offering tree-free paper and products.
- Advocating ECO-INNOVATIONS through experimentation and deeper understanding of the fiber.



Bagasse

One of the most prevalent agricultural waste products in the world, sugarcane bagasse (SCB), is produced in INDIA on an annual basis in the range of over 100 million tonnes

The benefits and advantages of using Bagasse-based paper include:

- Sugarcane bagasse is a fibrous residue of the sugarcane, produced in India in an annual amount of over 100 million tonnes.
- For every ton of sugarcane produced, 2-3 tons of bagasse are produced.
- A ton of sugarcane bagasse can replace 1-1.25 cubic meters of wood.
- Bagasse is rich in cellulose, ranging from 32%-48%, making it easier to cook and requiring fewer chemicals than wood pulp paper for pulping.
- The technology and equipment of bagasse pulping and alkali recovery process is more mature and simpler than other grass fiber materials.
- Sugarcane grows quickly and reaches full maturity in an average of 14 months, compared to trees which need around 10 years.
- Sugarcane is a fibril so it does not need to be bleached for inks and dyes, making it more natural and eco-friendly.
- Sugarcane bagasse can replace traditional tree paper with eco-friendly tree-free paper.



Textile and Jute waste

- The textile industry is the second-largest employment generating sector in India, contributing over 44 billion USD per annum to exports.
- Textile waste, or 'chindi', is rich in cellulose, making it easy to break down and convert into paper.
- Textile pollution is an enormous waste and environmental issue.
- Converting cotton rags into paper is an energy-efficient and faster process, and the paper produced is strong with minimal chemicals added.
- This is an effective way of maximising upcycled content, and helps reduce the carbon footprint.

With Eco Innovations in turning paper into rolls it is an ideal substitute to KRAFT and other paper made from trees



Hemp



- Many Indian states such as Odisha, Uttarakhand, Rajasthan and Andhra Pradesh are cultivating large-scale hemp farms.
- Residual hemp is available in more than 5000 tonnes per annum.
- Hemp paper is stronger and more durable than wood pulp paper and is a good source for alternate fibers for packaging and hang tags.
- Hemp paper is 100% recyclable and compostable.
- Hemp paper is more environmentally friendly than wood pulp paper and produces more pulp per unit of land.
- Hemp paper is more sustainable since it can be grown in many climates and does not need to be replanted after each harvest.
- Hemp paper is naturally resistant to pests, fungi, and molds, making it ideal for storing documents or other items for long periods of time.
- Hemp paper has a softer texture and smoother finish than wood pulp paper, making it ideal for creating artwork or printed materials.

The Bluecat Paper Mission

1. **Promote** tree-free solutions for packaging and stationery.
2. **Introduce** climate smart initiatives such as creating paper from water hyacinth, rice stubble and other waste products that enter the landfill
3. **Upcycle** waste from landfills and farms into paper.
4. **Increase** water recycling efficiency to reduce water consumption in paper making.
5. **Reduce** or eliminate the use of chemicals to make paper compostable.
6. **Reduce** Pressure on Trees by offering sustainable and clean paper
7. **Create** employment opportunities for women and men
8. **incentivize farmers**; set up supply chain for alternative fiber sources for paper making.
9. **Utilize ECO-innovation** to create paper in roll forms to reduce costs and increase market share in sustainable paper.
10. **Implement** processes to increase paper making efficiencies.
11. **Support research** and development for fibers high in cellulose to reduce carbon footprint.
12. **Scale up operations** to cause greater IMPACT and help reduce the pressure on Trees for paper making



Training programmes for women empowerment

Bluecat Paper is ideal for women employment due to the nature of paper making and conversion of paper into products

- Bluecat paper has training programmes that promote Vocational training for women
- Bluecat Paper focuses on developing technical skills for a specific paper making
- Training at Bluecat Paper, includes helping women with specialized jobs such as conversion of paper to paper bags, books, files folders and other gift articles
- The women are trained to operate cutting machines, make paper form agro based products, calendaring and finishing
- Cotton mache products made from cotton and other agro based pulp is converted into bowls, artistic plates and other products
- Along with the above the following training programs are undertaken to empower and increase awareness such as New Employee Orientation, Team Training, Leadership Training, Technical Skills Training and Soft Skills Development.



Women empowerment at Bluecatpaper - case studies..



Esther - 47 Married.
19/Aug/2019 Housekeeping Skills: hang paper and remove the paper. Screen printing



Annapurna - 34 Married.
15/Jan/2018 Is now an expert making tree-free notebooks, bags and products in addition, she takes care of online orders and dispatch



Rekha - 34 Married.
2018. Is one of our most creative product makers and helps designers with conceptualizing new products



Nethravathi - 41 Married.
2022 Makes paper and screen printing of paper







Training & Awareness Programs

- Creating awareness & conducting workshops on the benefits of tree-free paper.
- We encourage and educate children to visit and learn more about clean and sustainable paper.
- Training and waste management programs are conducted to spread awareness about circularity and zero waste concepts







ABOUT THE FOUNDER



Kavya Madappa is the founder of Bluecatpaper. Kavya founded Bluecatpaper in 2018 after researching paper and paper making for ~~four~~ years. She studied paper making and did a few courses in KNHPI (Jaipur) and Pondicherry. Kavya Madappa is a Commerce graduate and has completed her Chartered accountancy Internship in 2001.

She contributes proudly to all sectors of the Indian economy

Primary sector: As a coffee planter, she owns and manages over 150 acres of coffee estates in Coorg where she grows coffee, pepper and other spices.

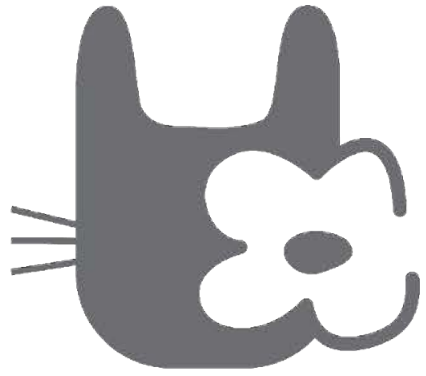
Manufacturing sector: Creating and upcycling residual waste into tree free paper. Contributing to a better planet, creating employment, empowering and training women

Tertiary sector: Kavya Madappa set up an Eco friendly resort, Amanvana in 2009. Amanvana spa resort is on the banks on the River Kaveri and is home to over 300 species of flora fauna and 65 species of birds. The resort is rated as one of the best resorts in Coorg by Condénast traveller.

Kavya Madappa employs over 200 people in all her concerns and is committed to making a change for a more sustainable future.

THANK YOU





bluecat paper™

tree-free paper

THANK YOU