

Turning Trash into Treasures: Plantable Pencils from Recycled Paper Waste

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“No one is perfect... that is why pencils have erasers”- Wolfgang Riebe

For years, people have been trying to find ways to reduce the amount of waste that ends up in landfills. It is estimated that approximately 8 million trees are cut down each year to manufacture the pencils we use every day. Over 13 million hectares of forest are lost due to deforestation, with 36% going to paper industry and 42% going to timber-based items, which amounts to 18-20 billion pencils. Furthermore, nearly 85 billion tonnes of paper trash are generated each year, with 40% ending up in landfills. In addition to landfills, 9 billion used pens are discarded globally each year, contributing to plastic accumulation (United Nations, 2018).



Fig: 1 Created by author

The unique way to prevent the environment and us from this scenario is by turning trash into treasures. One of the most popular approach that has been gaining traction in recent years is the use of plantable pencils.

Plantable pencils are a great way to combine the convenience of a traditional pencil with the environmental benefits of planting trees and are an eco-friendly alternative to conventional pencils. They are made from recycled paper and contain a special seed capsule that can be planted when the pencil is no longer usable. The idea of plantable pencils is to reduce the amount of paper waste that ends up in landfills. Instead of throwing away used paper, it can be recycled and turned into a useful product.

Seeking to the importance of Plantable pencils:-

- ✓ With the use of plantable pencils, users can help to replenish the forests and help to create a more sustainable environment.
- ✓ Additionally, using plantable pencils can help to reduce the amount of waste that is produced as the pencils are made from renewable and biodegradable materials, which means that they will not contribute to the growing problem of plastic pollution.
- ✓ Plantable pencils are a great way for individuals and organizations to show their commitment to protecting the environment.
- ✓ They are an excellent way to encourage people to think about the effects that their actions have on the planet and to take action to help make a difference.
- ✓ Plantable pencils are a great way to teach children the importance of recycling and sustainability.



Fig: 2 Created by author

Overall, plantable pencils are a great way to show commitment to an eco-friendly environment and to help reduce the amount of waste being produced. By using plantable pencils, organizations and individuals can help to reduce deforestation, combat plastic pollution, and create a more sustainable future.

The process of making plantable pencils is relatively simple by following these simple steps:-

Paper waste is collected and sorted into two categories – clean and dirty paper sheets



The clean paper is then shredded and mixed with a binding agent to create a slurry. The slurry is then poured into a mold and allowed to dry.



Once the pencil is dry and takes a shape of cylinder, a seed capsule is inserted into the pencil's core and press down firmly to make sure they are secure. (The seed capsule contains a variety of flower, herb, or vegetable seeds that can be planted when the pencil is no longer usable)



Place the pencils in a sunny spot to dry for 24 hours and once dry, the plantable pencils are ready to use!



The seeds will then sprout and grow, turning the pencil into a plant.

The process of making plantable pencils is not difficult, but it does require some patience and creativity. The materials needed to make the pencils are readily available and the process itself is relatively simple. All that is required is paper waste, a binding agent, a mold, and seed capsules. By following these few simple steps, anyone can turn trash into treasures. This can be done using old waste newspaper available at home. This can be a useful approach to conserve nature and for earning money from wasteful newspaper

Let us see some successful Stories of plantable pencils Entrepreneurs in India

1. The Kaagith project is an initiative to reduce dependence on wood for pens by using recycled materials and providing livelihoods to underprivileged communities. Discarded newspapers and papers are used to make pens and pencils that also have embedded seeds to promote afforestation. The products are provided in customizable kits to encourage companies to promote eco-friendly practices. The direct beneficiaries of this project include paper waste collectors and domestic migrant workers, and the team expects that more than 200 families will be positively impacted in the short term. The team also hopes to scale up this project by entering into formal arrangements to manufacture and market the products at a larger level.
2. Vikash Khandelwal is an entrepreneur from Coimbatore who has developed pencils made from newspaper. He experimented for two years with different newspapers and glues to create a product that was both environmentally friendly and safe for children to use. He and his team made two pencils from a double sheet of newspaper and the glue used has a waterproofing effect. The pencils became popular and Vikash received orders from other parts of the country, who requested customized paper coverings. He has given them out as

return gifts and they are used in hotels, events and conferences. His daughter and family helped him test the pencils and their feedback improved the product.

- Pranava Kumar, a 36-year-old engineer, and his wife Haripriya abandoned their careers after sixteen years with IBM to open ShivTat Agro, an organic food store. To broaden their business, they discovered recycled paper pencils and started to make them. They called their pencils "auxo," a pun on the word oxygen, and released them about a month ago. The pencils are available in vivid and colourful patterns as well as basic grey and cost Rs 7 each. They are focusing on schools, companies, and hotels to raise awareness about global warming and climate change. Pranava and Haripriya intend to open their own plant in 2017.

Conclusion

The concept of turning trash into treasures is an excellent way to turn something ordinary into something extraordinary. By using recycled paper waste to create plantable pencils, we can help reduce the amount of waste going into landfills, as well as providing a unique and creative way to give back to the environment. Plantable pencils are also a great way to promote environmental awareness and inspire others to create their own eco-friendly projects. Overall, this is an incredible project to undertake and can be a great way to help reduce our environmental footprint. With this project, we can prove that creativity, recycling, and a bit of effort can result in a wonderful, sustainable product that can help improve our environment.

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