

The Overview of

SO!
Brick

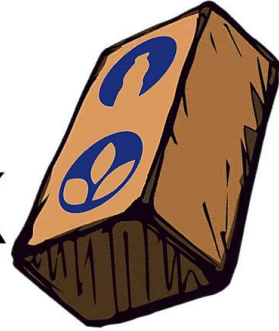


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1. Problem

Urban areas in India waste an estimated 9.4 million tonnes of plastic waste annually.¹ This is attributed to many factors, however, it is easy to point out India's lack of waste management system. As a result, it is a significant contributor to ever increasing landfills throughout the country, which could lead to devastating and irreversible consequences in the years to come. While recycling would improve the waste management in India, it is far too complicated and expensive to implement such a coherent policy throughout the country under the current circumstances. A more efficient method to reduce waste would be to reuse waste such as plastics, something which could provide a greater immediate impact without the extensive planning.

2. Solution

We decided to convert the already existing waste into the construction material, of which production will be more cost-efficient and the product more durable than the current ones on the market. Our bricks are stronger, more durable, and longer-lasting than the generic clay bricks. They are made of the four elements: plastic waste, clay, sand and battery casings that will make the bricks even more solid and immune to the potentially unstable weather conditions. SoBrick is founded on a unique interlinking design that allows them to use less cement than their counterparts and adds an element of reusability to create new buildings when the bricks are taken apart from old buildings, allowing their continuous use for decades to come. Creating our bricks by the use of repurposed waste materials and fortifying them with the potential for being subsequently reused, we empower the continual use of resources in the economy leading to the more sustainable future.

¹<https://www.thehindubusinessline.com/opinion/manage-plastic-waste-effectively/article32864516.ece#:~:text=India%20generates%20around%2026%2C000%20tonnes,cent%20of%20municipal%20solid%20waste.>



3. Resources

India is the perfect environment to manufacture SoBricks because of its cost-effective procurement of plastic and battery waste from urban cities. Plastics can sustain exposure to the harsh sunlight, the dense pressure of the depths of the oceans, and the turbulent conditions of nature. They are the sturdiest raw material we have.

India's Kabadiwala system is an effective manner to draw plastic waste from households and industries across the country. Unfortunately, under the present circumstances, literally all that plastic ends up in growing landfills. Our action is to redirect the waste retrieval Kabadiwala system to our SoBrick plants instead of landfills. This single change can prevent the extinction of our humanity, which is the current direction we are headed with our population and waste multiplying manifold.

4. Target groups

Our bricks target lower-middle income Indian families in urban centers, however, it can be applicable to all social classes across the globe. Due to its eco-friendly nature and low cost of production, this can impact not only lower-middle income families but contribute to lower carbon emissions throughout the world. This is due to the manufacture of our bricks only needing to merge existing materials, significantly lowering the cost of production and its carbon footprint as materials do not have to be refined or mined. Similarly, the 'lego-like' nature of our bricks reduces the need of cement that is required for normal bricks leading to the effects discussed previously. Through the more cost-efficient production, we can offer the lower final cost of the product than the competitors on the market, and thus make the construction of a house more affordable for the low and lower-middle-class Indian families. In particular those that just escaped the tract of extreme poverty, as this number reaches 60 000 Indians every day. We strongly believe we can support those families at the very beginning of the new way in their lives, making the first expenses, such as building a house, less burdensome.



5. Partners

With renowned construction companies in India such as the Max Homes residential construction services, we plan to work in partnership in order to construct the houses. In addition to the afore-mentioned type of companies offering the comprehensive housing services to their customers, we will also cooperate with the companies offering solely the construction service, reaching more potential customers. With their intricate supply chains, they could allow for the potential reduction in cost allowing more families to benefit from this product and business partnership.

6. Plan for Growth

SoBrick plans to focus on Indian Urban centers, however, due to its potential in international markets regions such as Europe and Central & West Africa will be considered as there is significant potential in reducing waste. In Europe, governments have pledged to be carbon neutral in the coming decades, potentially establishing cooperation with private enterprises and national and/or regional governments to reduce carbon emissions. In Central and West Africa, there exists an enormous plastic problem among the region as there are no proper facilities to facilitate the reusing and recycling of waste products. As a result, cooperation with national governments along with UN and EU sponsored programmes (such as United Nations Environment Programme and UNICEF) will contribute to the reduction of waste and the decrease in poverty. This means that our expansion will not only reduce the global waste but also may be able to significantly contribute to lifting millions of individuals out of poverty.

7. Sustainable Development Goals

Besides the Sustainable Development Goals that our startup is touching upon directly, we also distinguish the ones that are not straightforwardly addressed, however affected by our initiative to a measurable extent.

Goal 1: No Poverty

Providing cheap and effective materials to help people build homes will allow for people to use their resources to invest in their jobs and futures. This investment will allow people who once had been in poverty to use their new spare money to better their financial situations.

Goal 2: Zero Hunger

SoBrick will help to minimize hunger as access to cheap means to build homes will allow disadvantaged people to use the remaining money and resources to buy or grow their own food.

Goal 3: Good Health and Well-being

Having safe and affordable dwellings will allow people to maintain their health as they will be shielded from the harshness of the elements. Well-being will also be ensured as having a safe home is a great determinant of well-being.

Goal 4: Quality Education

Access to the materials to build will allow communities to construct places where



education can be conducted in a quality, safe and effective manner.

Goal 5: Gender Equality

SoBricks can be used to provide access to school houses for people of all genders. Furthermore, women and girls will have access to these bricks and will be more effectively able to establish their own homes if they face abuse from others in other homes.

Goal 6: Clean Water and Sanitation

SoBrick allows for the creation of homes and buildings that will be safe and sanitary and free of unsanitary conditions.

Goal 7: Affordable and Clean Energy

SoBricks will be energy efficient and conserve energy in homes that are built to conserve energy.

Goal 8: Decent Work and Economic Growth

Decent work and economic growth can be provided with SoBrick as the bricks will need to be assembled through work. Having a cheap and affordable product to build homes and buildings will stimulate economic growth.

Goal 9: Industry, Innovation, and Infrastructure



The innovation of SoBrick will allow for the construction of homes and schools; forms of human infrastructure.

Goal 10: Reduced Inequalities

Providing cheap access to building materials will allow for more people to gain access to these materials and reduce housing materials.

Goal 11: Sustainable Cities and Communities

Using bricks made from recycled materials is indicative of a sustainable community as waste is being repurposed and incorporated into buildings and everyday lives.

Goal 12: Responsible Consumption and Production

These bricks will be produced in a way that maximizes efficiency and minimizes waste. The bricks will be used to build homes and schools to better the lives of people in their communities.

Goal 13: Climate Action

Using bricks that are cheap and recycled, greenhouse gas emissions will be reduced as other products that may emit greenhouse gases in their production are limited and replaced by clean and energy efficient bricks.

Goal 14: Life Below Water

Using recycled materials to make these bricks will reduce the amount of waste that



flows into the ocean. As waste that flows into the ocean is limited, less pollution occurs.

Goal 15: Life on Land

Using recycled materials is essential as it will reduce pollution on land and protect habitats of animals that may be struggling to survive.

Goal 16: Peace, Justice and Strong Institutions

Providing safe living quarters for the population will allow for the proliferation of peace as people who have safe homes will not be forced into crime or banditry and will be able to better focus on bettering their lives.