
Sustainable Development Goal 12

Responsible Production and Consumption

Research Methodology

→ Primary Research

We sent out questionnaires and recorded the insights from 67 participants from different ages from the residential sectors, the industrial sectors and the mixed sectors

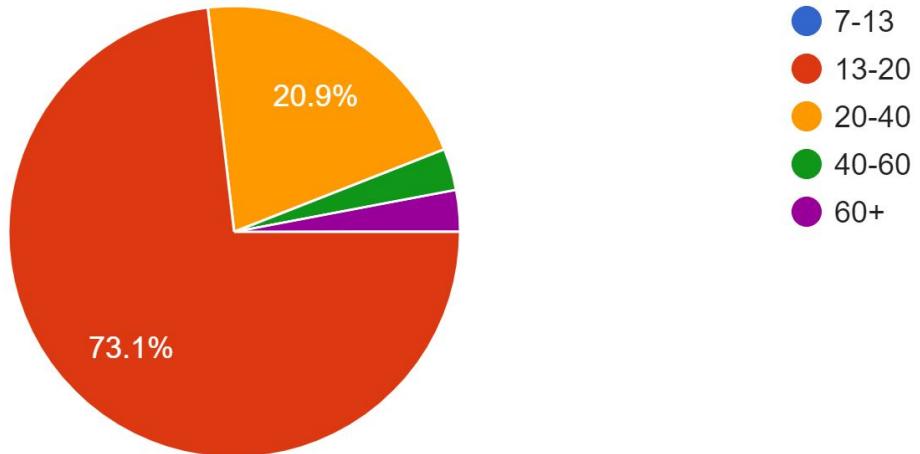
→ Secondary Research

To back this up, we went through existing UN reports, case studies, research papers and articles from reliable news websites.

Primary Research Findings

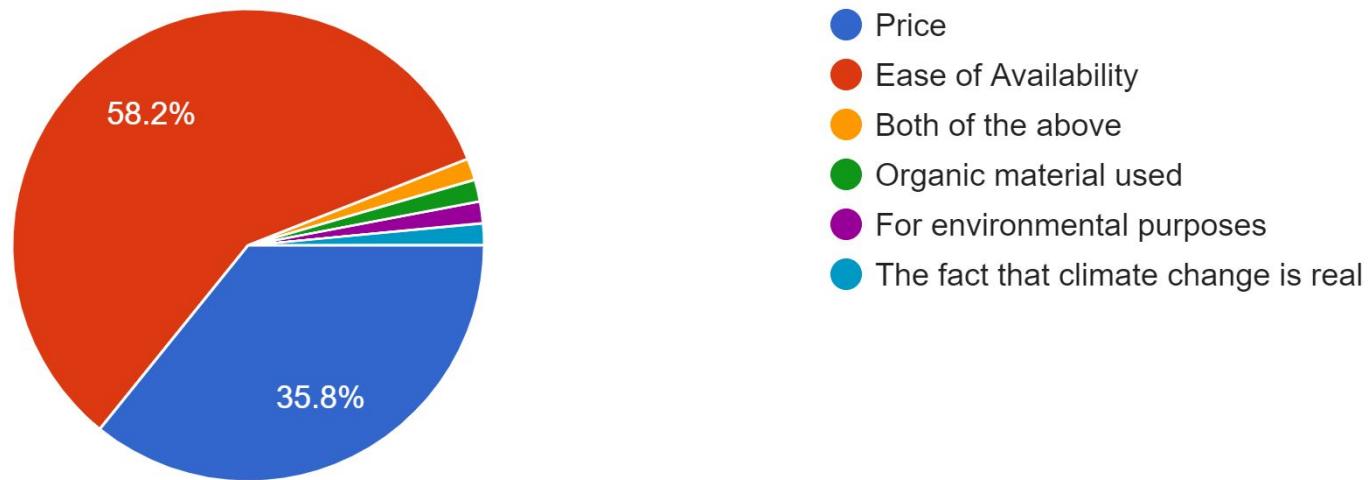
Age Group

67 responses



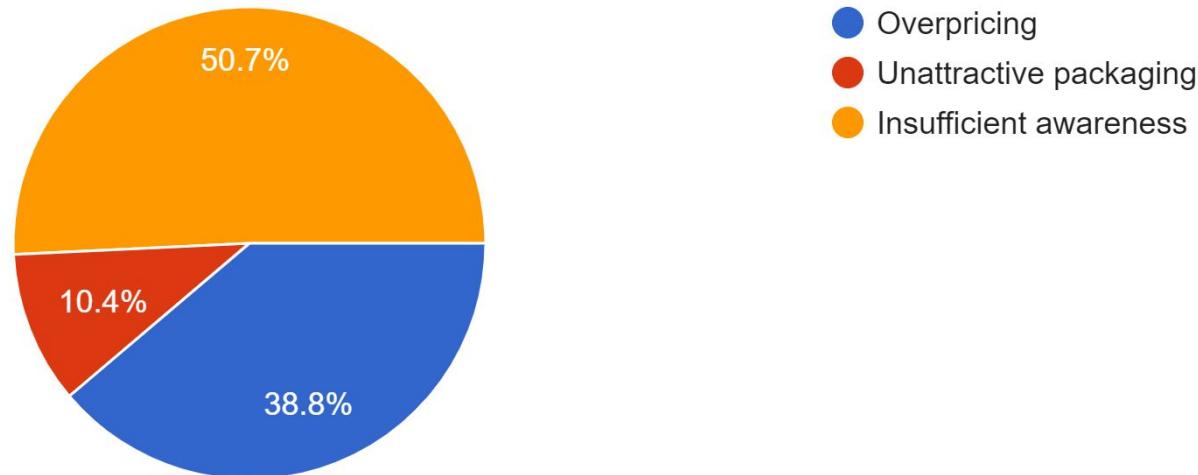
What are the factors that determine your willingness to choose Eco friendly products?

67 responses



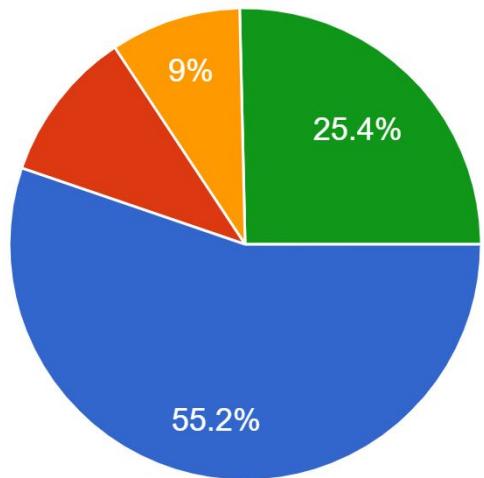
What are the Barriers you face in opting for Eco friendly products?

67 responses



How do you reduce waste of resources ?

67 responses



- Take reusable bags to the store when shopping
- Reduce or eliminate the use of paper plates and cups
- Store leftover foods in reusable containers instead of single use plastic containers
- Donate slightly used clothing, furniture and other items to local non-profit organizations

Conclusion from Insights

→ **Sustainable Alternatives Are Not Easily Available**

We need to work on making a system to foster the ease of the availability of sustainable alternatives for existing products in the market to ensure more people opt for these alternatives.

→ **Lack of Awareness**

Our Research shows that many people require more knowledge regarding sustainable alternatives

→ **Inculcation of Reusable Measures**

Majority of the Surveyors Prefer reusable sustainable alternatives.

Secondary Research Findings

→ Case Studies

We started our secondary research process by investigating the major companies in India and how they are implementing SDG-12

→ Mumbai's Current Issues

We looked at Mumbai's Environmental Problems relating to SDG-12

→ Trend Analysis

To find a feasible solution we started targeting and strategizing based on the major trends today.

Case Studies





As a part of its green initiative, online classifieds company OLX India has replaced the **plastic tableware** in its cafeteria with **reusable cutlery**. Paper recycle bins have been installed in its Gurugram office to store paper waste. ***“Every month, the collected paper waste is reused to produce reusable office stationery,”*** says Varun Madan, head of human resources, OLX India.

Flipkart



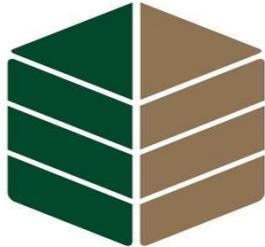
E-commerce firm Flipkart, has **replaced paper cups** with ones made of **ceramic** and **glass**. Employees have been given **stainless-steel water bottles** that they can refill. *“This one move is helping us save 4,000 litres of potable water every week, and not add 10,000 plastic bottles to landfills every year,”* says Nagaraj Kulkarni, senior director, projects, at Flipkart. The company has also placed large bins at different points **on each work floor to segregate wet and dry waste**. To ensure this, and minimize the use of garbage bags, **it does not allow dustbins at individual desks.**



Pune-based technology services company Persistent Systems has **stopped the use of disposable plastic paper cups and plates**, and is hoping to **restrict the use of tissue paper**. On an average, it dedicates around **10 days in a year** to programmes such as "**no plastic day**" or "**zero food wastage week**", to reinforce sustainable consumption practices.



Mumbai-based Mahanagar Gas Ltd (MGL), a natural gas distribution company, has adopted initiatives such as the **conversion of waste paper into writing pads and envelopes through a waste management enterprise**, Sampurna Earth. *"The aim is to drive both the individual (employee) and the organization towards eco-friendly practices,"* says Goutam Ghosh, technical director at MGL.



Waste Ventures India, a Hyderabad-based waste-management enterprise has worked with around 13 companies, including Google India, Infosys, Hindustan Unilever and Amazon India. It has developed a **software that allows companies to track waste generation, and design green strategies accordingly.** *“Through this process, for example, a company realized it was generating a lot of tetra-pack waste. After examining the information, instead of going with 100-200ml juice packs, the firm decided to use 2 litre boxes for its events and meetings. In that way, they reduced tetra pack waste from their premises by 30%,”* says Abdul Rahman Janoo.

Mumbai's Current Problems

Table 2 Categorization of environmental issues in Mumbai

Type	Typical issues	Causes	Major impact	Spatial extent of impacts
Type IV : Wealthy lifestyle-related issues	Overburdening of energy and natural resource; dioxins	High consumption; rich lifestyle; low incentives for improvement	Chemical ingredient and dioxin-caused abnormalities; overextraction of resources	Regional, global

Trend Analysis

As mentioned in the previous slide, We can see that in the past that most of the population in Mumbai lead a rich and luxurious lifestyle and lacked the incentive to shift towards a more sustainable lifestyle. But now in 2020 this could be changed.

To change the past mistakes, we decided to analyse the top trend of 2020 to see what we can do to salvage this situation in the future.

Green Pressure



When sustainable alternatives are widespread, affordable and just as good or better than the legacy option, then eco-consumption *becomes less about the status of opting in*, and more about the *shame of opting out*. That's why in 2020, millions of consumers will seek out products, services and experiences that help them alleviate rising eco-shame.

Our Ideas

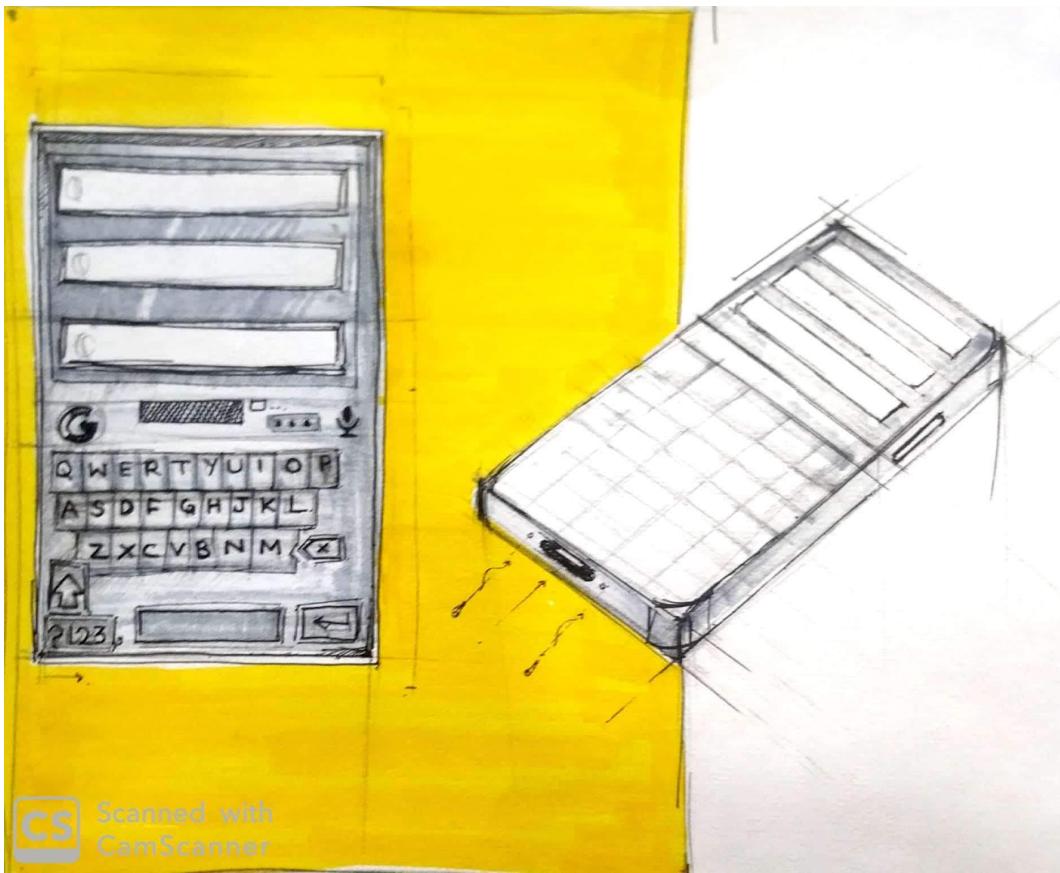
**Rural Sustainable
Alternatives to
foster reusability**

Hriday

**Creating
Behavioural
Change through a
daily system**

Shihij

Daily System



Sustainable Alternatives

THE VERY USEFUL INDUSTRIAL HEMP

Hemp cultivation requires no chemicals, pesticides or herbicides.

HEMP SEEDS

HULLING

- HEMP MEAT**
 - Food
 - Dairy products
- HEMP SHELL**
 - Flour
 - Bakery Products
 - Cooking Oil
 - Fuel / Paint
- HEMP OIL**
 - Personal Care Products
 - Cooking Oil
 - Fuel / Paint
- HEMP CAKE**
 - Food
 - Beer
 - Feed

PRESSING / CRUSHING

Intermediate processing

Further processing

HEMP is a RESOURCE

20 years for trees to mature **4 months** for hemp

Hemp can yield 3-8 dry tons of fiber per acre, **FOUR** times what an average forest can yield.

HEMP FIBER

DECORTICATING

HEMP HURDS

Scutching

Fiber board
Compost
Mortar
Paper filler
Absorbent bedding
Chemical feedstocks
- Plastics / Paint / Sealants

Through a heat process called PYROLYSIS
Hemp Biomass can also make Ethanol, Methanol & Methane Gas

with over 50,000 different uses...

Hemp seeds contains nutritious, Polyunsaturated Fatty Acids (PUFAs) 80% the highest amount found within the plant kingdom. Highly nutritious of humans and animals.

This means all parts of the plant are being used, or put back into the earth.

Anything made out of cotton, timber or petroleum can be made out of hemp

Hemp fiber is the strongest natural fiber in the world

Hemp hurds can be cleanly converted into Gasoline!