# Waste to Waste the Waste t

The Ideal Experience of wearing Clothes made out of Agriculture/Food Waste





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Material transformation is being explored like never before, material scientists and designers are looking towards the realm of unexplored. Transforming 'agricultural/food waste' to 'wealth: raw material' for the fashion industry is the new exploration of regenerative materials.

We want to evolve the perspective of the 'common man' which will motivate them in choosing a new direction in their choices to pursue the concept of sustainability with ease.

Exploring the endless opportunity technology offers to innovate practical, economic, and accessible alternatives to compete with the high-impact synthetic materials. The new materials assist in uplifting the community and providing them alternative sources of livelihood.

# Who are we?

We are creative individuals who were united by our passion for the border topic 'Waste to Wealth,' where we narrowed it down with our common interest to materials/clothing made from agriculture or food. The passion fueled us to drive our research journey to our ultimate destination which you will experience through this documentation.

### THE RESEARCH TEAM











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# Project Background

The fashion industry has been exploring and experimenting ever since its advent, but now is when it's tapping into the magnitude of resources and techniques to make them tangible, realizing its impact on the planet. The untouched knowledge of technique is a tool to bridge the old with the new.

The first association with materials made from agriculture or food waste was unpleasant; users imagined it to be gross, with a peculiar smell and an uncomfortable texture. The incertitude of people towards these new materials and a change in their choices to embrace clothing made of agriculture or food waste is a challenge to be faced. Furthermore, to shift the mindset of people to see waste in a new light, it needs to be rebranded as a byproduct of a positive resource that can be used to make products.

Our objective of the research is to evolve the perspective of the 'common man' to make sustainable materials acceptable, expose them to fabrics made from agriculture or food waste and reflect on the essence of a new direction. The ultimatum of the new path is the purity of the process and communicating it to the 'common man' to ensure trust for adopting the flipside.

The phase of qualitative research was meticulously fabricated to probe the true feelings, concerns, needs, aspirations that have to be understood to fulfill the journey of evolving perception. To explore our objective, we conducted a program of research with a total of 138 responses aged between 20 to 70 years who were located across the globe in diverse places in the USA, UK, Europe and India with diverse backgrounds and shopping experiences.

We adopted multiple research methodologies to attain qualitative data. Recruiting participants from screener a survey for interviews, a cultural probe, a qualitative survey, and a workshop to tap into the sensory needs and aspirations of users to understand every facet of their necessities. The trends, patterns and commonalities in people's thoughts, aspirations and shopping experiences helps us synthesize our data to represent their true feelings. We affinitized our data and concluded with 18 attributes which will help a 'common man' evolve their perception and adapt to materials made from agriculture/food waste.



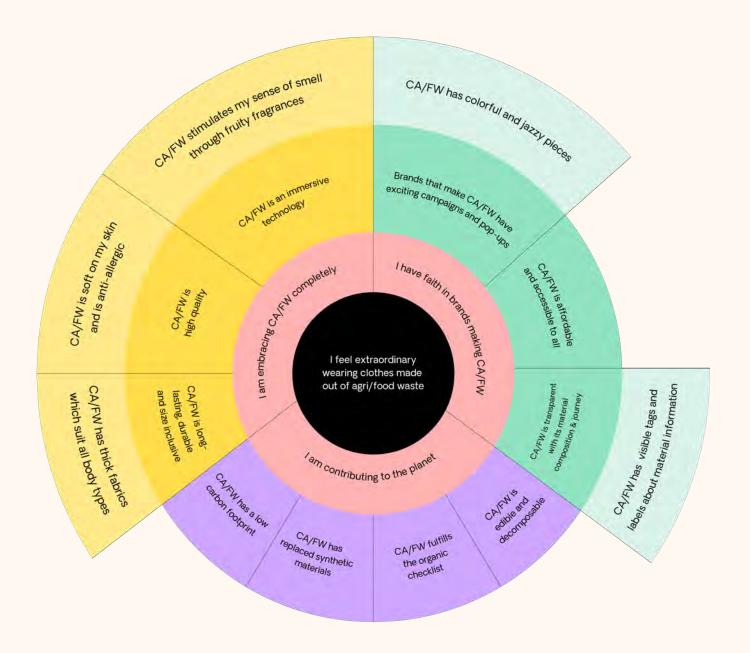
# "There is an incredible opportunity to create value out of waste."

- USFF

# "One man's trash is another man's treasure"

- MALAI

# Framework





# I feel extraordinary wearing clothes made out of agriculture/ food waste

### THE VALUES

 I am embracing clothes made out of agricultural / food waste completely:

It is vital to have a thought put forward by someone we trust to change our perception and educate people along the journey of adopting clothes made from agriculture/food waste. The idea of clothing made from agriculture and food waste is a significant change. To accept and adapt 'the change' as one believes is essential to participate and have equity in all aspects of life. Embracing by appreciating the holistic experience that revolutionizes material innovation which involves a tangible transition of food one can't consume otherwise.

People are willing to accept the new technology and make a difference by contributing to the planet positively. They want to shift their behavior towards clothing made of agriculture/food waste, despite the convenience of fast fashion. Having a shift in mindset to embrace the 'new material' that is compostable, biodegradable, or would disappear into the earth without leaving a trace. They imagine themselves adopting clothing made of agriculture/food waste little by little as they feel 'sustainability starts with US'.

People want to embrace this innovation, and feel motivated and accomplished to wear them. Despite being skeptical about its appearance and comfort level, users want more options and choices that aid their selection process.

"We want the clothes to be colorful and jazzy that look right out of a runway instead of the 'boring,' raw, neutral color palette."

### I have faith in brands making clothing made of agriculture/ food waste

'The Faith' in a brand is gained when they provide a consistent clarity, motivate people, and most importantly is a representation that consumers can believe in. People will adopt clothing made from agriculture/food waste when they feel they can connect with the story, the transparency and the transformation, the feasibility of the products, see swatches or samples, and be surprised by learning about the journey of the materials which are being used to make clothing made from agriculture/food waste.

The ideal experience of buying clothing made from agriculture/food waste will be to start asking the questions to seek authentic information of the materials, their sourcing and tactility, manufacturing process, and brand transparency to avoid greenwashing.

People are fuelling the idea of tossing fastfashion and switching to clothing made from agriculture/food waste which will force brands to incorporate sustainable practices in their supply chain, make circular fashion happen, change their company policies around environmental regulations, make ethical products and embrace this culture as a design challenge but they also feel it is meant for the niche market.

Due to the rise of small sustainable brands, established businesses are relooking at their practices and moving to sustainable clothing alternatives, because people want to buy from local communities and cooperatives who have lesser impact on the planet through their manufacturing. Brands can eventually replace all conventional fabrics and increase the potential of clothing made from agriculture/food waste by using various materials, designs, and patterns.

### I am contributing to the planet

People have become conscious and concerned about the world's depleting natural resources, pushing the idea of recycling and utilization of 'byproducts' of existing materials to make clothing that makes a difference in the planet's future. The current situation is not bringing their spirits down. In contrast, clothing made from agricultural/food waste has raised hopes by reusing and investing in waste that has already had a life while consciously reducing the carbon footprint and harmful emission from the burnt waste. This provides us with an opportunity to consume waste positively, helping the farmers recycle and utilize it to reduce the burden on landfills.



## I want clothing made of agriculture or food waste to be high quality

The sentiment of being superior is one of the highest selling points for any product. A human desire is to feel confident and comfortable, and people are wearing clothes manufactured from agricultural and food waste that are durable and of premium quality. Furthermore, long life cycles of materials make the users look and feel stylish, and they are more drawn to these waste-based sustainable solutions.







# I want to have clothing made of agriculture/ food waste long lasting, durable and size inclusive

In retrospect, the superior quality of a product has a strong direct correlation with the duration of its life. Population's strong desire to wear clothes crafted out of agricultural/food waste has the same characteristics: lasting longer, less probability of decaying, comfortable and reliable. Consequently, a group of informed users were curious to understand if these garments would directly affect human skin, the durability and quality of these garments when washed.

In addition, they are also interested in being informed on if these garments can cause allergies, would have an unpleasant smell, or how well they would fit. With time, these concerns were incorporated in making clothing made from agriculture and food waste a better for consumers.



### I would want my clothes made of agriculture or food waste to have a low carbon footprint

A carbon footprint account consists of the quantity of the carbon compounds emitted due to the consumption patterns of an individual. Alternative materials have provided choices to reduce an individual's carbon footprint. People are seeing experts' efforts to improve clothing made from agricultural or food waste, making them optimistic about reusing and investing in wastes that have already had a life that voluntarily reduces carbon emissions, similar to secondhand and thrifting culture.

People buy clothing made of agriculture or food waste, there ought to be a carbon footprint account that informs them of their effort to protect the world's resources.





## I want my clothing made of agriculture/food waste to replace synthetic materials

Over the years, people have been using a variety of conventional natural woven fibers as well as synthetic materials and currently have shifted to sustainable alternatives which have less or no impact on the planet. They also believe that selling old garments, thrifting, and repurposing them in new ways is a good method to limit the usage of synthetic materials.

Material scientists identified that sweet spot for adding other organic materials to ensure that fabrics made out of agriculture or food waste remain durable, in contrast to adding synthetic materials. Sustainable materials have better quality, are biodegradable at the end of their life, and do not harm the earth unlike synthetic materials.



### I want my clothing made of agriculture/ food waste to be edible and decomposable

Edibility of a product means that it is safe to consume, regardless of taste, and is frequently defined as having some amount of acceptable flavor. On the other hand, decomposable means disintegrating or dissolving into particles that vanish without leaving a trace. Clothing manufactured from agricultural or food waste is edible and biodegradable, making it a unique attribute of the product and exciting individuals to experiment with it.





### I want my clothing made of agriculture/food waste to be affordable and accessible

With a shift in the population's perspective to accept clothing manufactured from agriculture and food waste, expanding the possibilities of waste production over various socio-economic needs making them affordable, accessible and inexpensive to the masses with given the understanding of these new materials.

## I want my clothing made of agriculture/food waste to be transparent with its material composition and its journey

People are examining the legitimacy of agricultural/ food waste materials as the brands are providing a brief description of where the material is sourced from, color swatches, a breakdown of the composition, and consumer education. The brand's website states everything that goes into creating the product, as well as if it is made locally.

When it comes to buying clothing made of agriculture or food waste as suppliers, manufacturers, designers, retail brands, and even consumers, brands are being extremely transparent because people are asking the right questions and require proof about certifications for sustainable products from the start.







## Brands making CA/FW have exciting campaigns and pop-ups

A product's story and the message are kept in front of people to increase awareness and improve the product's equity in one's mind through temporary retail spaces. These spaces provide an opportunity for people to interact with the material made from agriculture and food waste in an environment completely designed and controlled by them. Individuals believe that this would be a neat way to experience garments made from agriculture and food waste rather than watching it on a screen.

1 want my clothing made of agriculture/food waste to be a part of an immersive technology

An immersive experience that teleports an individual into an alternate reality or an imaginary world, allowing one to interact with their products and environment. People are exhilarated by the prospect of clothing made from agriculture or food waste and are awestruck by the concept. They feel this is a holistic experience that revolutionizes material innovation and helps with the transition of food they can't consume otherwise in a tangible manner.



"It feels emotionally unique, with a wow presence knowing that the part of the food that we can't consume into our body, is around us by wearing materials made out of food waste that can transform our fabric."



## I want the clothing made of agriculture/food waste to have a thick fabric and which will suit all body types

People gravitate towards practical clothes, have better durability, high quality, comfortable materials, and last a long time. They are lured into the current solutions because it offers good value for money and other advantages of easy return policies, accessibility, comfort, and convenience.

Clothing made from agriculture/food waste attracts people because of its longevity and perfect fit. They have no affinity for low-cost synthetic fibers such as polyester. People place a higher value on the fabric's quality than its price.





I want my clothing made of agriculture/ food waste to feel soft on my skin and should be anti-allergic

A fluffy fiber which is light and woven with natural fabric to feel good on the skin.

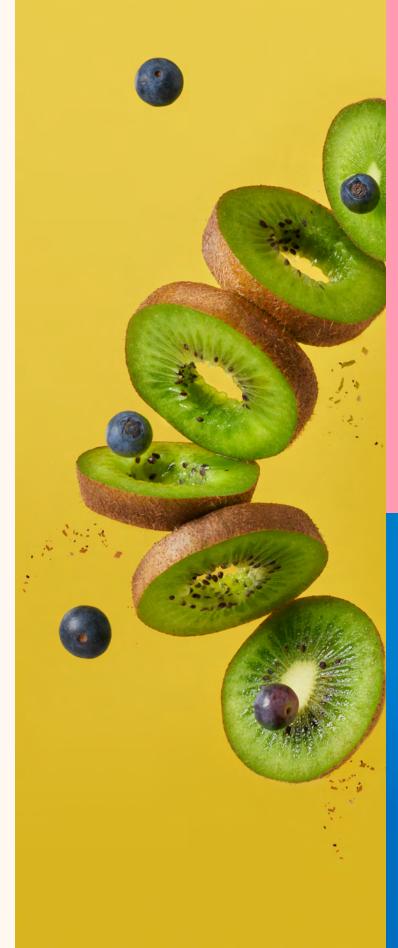


"We are attracted to the quality and designs of clothing made from agricultural/food waste because of their durability, longevity and ease on skin; we felt grape skin resembled leather or suede and were easy to wash."

- USER

of agriculture/
food waste to
stimulate my
sense of smell
through fruity
fragrances

A faculty that the body perceives as an external stimulus. When people engage with clothing made from agriculture or food waste to feel comfortable, their senses of softness, fragrance, vision, touch, texture, color, body movement, breathability, and balance are activated. They want to wear outfits that smell like orange flowers and give them a feeling of freshness. The clothing feels softer, better, and smells lovely after each wash.



# I want my clothing made of agriculture/ food waste to come be colorful and jazzy

Clothing made from agriculture and food waste has broken the stereotypical concept of sustainable clothing being dull, neutral, earthy, with boring silhouettes to colorful, jazzy, and looking straight out of runway collection pieces. These garments are breaking conventional norms by providing more options, choices, and a wide variety of feasible swatches, making the consumer's selection process an unparalleled buying experience.



I want my clothing made of agriculture/food waste to have visible tags and labels about material information

'Material information' on clothing made from agriculture or food waste entitles us with the foundation of trust, and the action of 'touching' builds on that foundation. Information on material sourcing broadens people's knowledge and educates them on the process. By being transparent, this 'visible information' on tags or clothing labels enabled the consumers to make this positive shift and prevent the possibility of greenwashing.



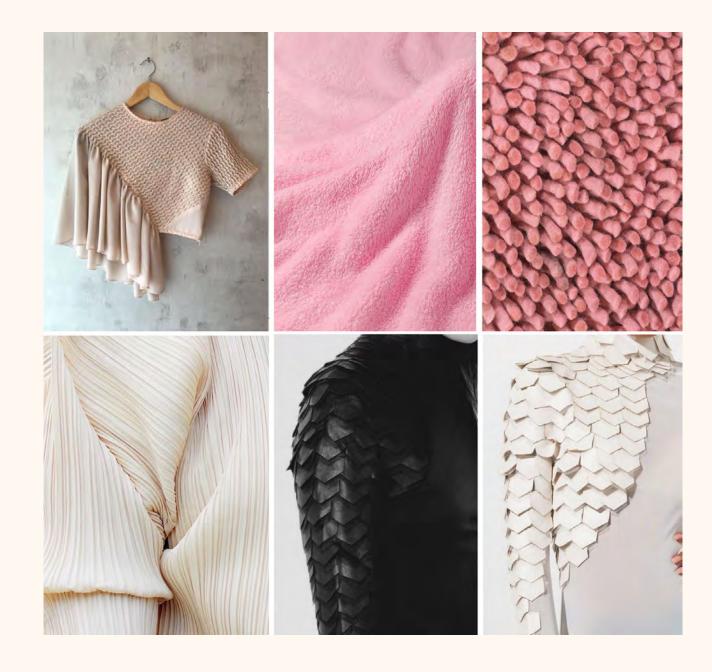
**DESIGN OPPORTUNITIES** 

# ShapeShifting clothes made out of food/agricultural waste

- Clothes that change their fit and texture
- Modular clothing

# Clothes that change their fit and texture

Local and established brands have come together to launch the all new clothes made out of agricultural/food waste that fit you the way you want them to fit! Each garment can fit a thousand different ways, based on how you want them to be on your body! Super customizable and makes you buy less. They also change their surfaces based on the temperature and environment condition



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### Modular clothing

Modular clothes are not finished clothes, but a concept that can be worn like clothes by collecting fabrics made of one piece. This allows customers to not only create their unique clothing designs, but also meet a variety of sizes. This allows customers to design their clothes in a different style every day.













### Sources

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