



# THE WASTE WARRIORS OF MUMBAI

Mumbai, India's 'City of Dreams', has lured people from all corners of the subcontinent in search of a better life. As a result, the home of Bollywood and India's economic hub now has a population of over 21 million. While the opportunities are huge here, so are the problems – and chief among them is rubbish. Every day the city produces a veritable mountain of more than 10,000 tonnes of solid waste. Some Mumbai citizens are taking a stand by devising their own recycling initiatives. Twiga meets two of these waste warriors hoping to inspire others to each do their bit to protect the planet.



## Rita Maker

In this age of barely-out-of-school YouTube stars amassing huge online followings, it's refreshing to find a 66-year-old Mumbai mum getting in on the 'influencer' act to spread her innovative plastic recycling ideas. Rita Maker creates mats, coasters,

lunch bags, clutches and bags out of plastic waste and shows others how to do the same through step-by-step video guides on her website.

Plastic, once regarded as a wonder material for its durability, is now seen as a menace for the same reason. The accumulation of these virtually indestructible products is a threat to life on land and sea. Rita decided to take on Mumbai's 'plastic menace', a mounting problem she had seen choking the city's drains and rivers and adding to the 180 ft mountain of waste at its notorious Deonar landfill.

Now retired and with time on her hands, the former social science teacher was after a way to do something for the environment from her



“Walking the talk is the best way to set an example.” Everything gets upcycled in the Maker household – not just plastic, but also dresses

Rita's recycling display at the BMC Expo

own home. She found it watching a video in 2016 on Facebook of a woman making mats from plastic bags.

“I was already making handicrafts from wool, thread and jute so I had the skill and raw material was already there,” she says. “The plastic menace had been making headlines for a long time and if I could do it I would be part of the solution of a problem that was fast becoming an evil. Without giving it a second thought, I got started.”

### Plastic yarn

Rita grabbed all the plastic bags and food packaging she could find in her home, flattened them and arranged like with like. Cutting the ends off each item, she was left with a series of plastic hoops, which she then knotted together to form a sort of yarn of plastic. She then began to crochet these yarns together.

Her first creations were mats, as they were simple in shape. Once they were mastered, Rita moved on to more complex items such as shoulder bags, baskets, tea coasters, dustbins and gift boxes. Soon the home Rita shares with her daughter in a Mumbai apartment block was packed with these functional and funky plastic products, each in its own small way reducing the amount of ‘new’ plastic in circulation. When her supply of plastic ran out, her

neighbours in the complex were keen to help out.

“After exhausting all the plastic bags at home I requested my friends and people in the complex to give me the plastic bags and they all willingly became part of my venture. And they continue to do so to this day,” says Rita. “Such is their enthusiasm that I have to request them to press a finger on pause button. Else it would become too difficult for me to handle all from home.”

A couple of her neighbours have even been moved to make their own plastic yarn and get crocheting and Rita has also shared her skills with a group of children in the complex. Friends and family have even taken some of the products with them overseas to spread the word. In order to globalise her message, however, Rita realised she would have to embrace the internet. She wanted to

get into as many homes as possible to reach those people who felt there was little in their power to affect the global plastic problem.

“Today most people have mobiles and access to YouTube,” says Rita. “Since I had been inspired by a video on Facebook, [I thought] the best way to spread awareness through my work would be to post a video online.”

More versed in crochet than computers, Rita was helped by her son and daughter in creating an online platform for her work.

### Inspiring videos

“My family and friends rose to the occasion to make the three videos posted on YouTube, which were shot on mobile phones. The website, which also includes the videos, was created by my son. When my videos were put on air people did get inspired, specially young girls. I know there will be someone who will take it up and that makes it worthwhile.”

The reach of the videos has led to Rita being asked by a teacher at a Viennese international school to give a lesson in bag making on Skype. In Mumbai, ideas such as Rita’s were part of a climate of change that this year saw the Brihanmumbai Municipal Corporation (BMC), the governing civic body of Mumbai, ban single-use plastics in June last year.

Rita has some sympathy for the BMC in the scale of the problem it faces and says it’s paramount that the people of Mumbai do what they can to help – not easy when so many of the population are more focused on their own day-to-day survival than a distant threat to the planet. When the plastics ban was announced, Rita showed her support by showcasing her products at the BMC Expo.

“How to handle all the plastic waste from an overpopulated city?

Latest idea - Rita's recycled plastic wine bags



Just as I couldn't have achieved all without the support of family and friends, how do we expect the government to do the same?" says Rita. "When the BMC imposed its ban on the use of plastic bags it was the first time I showcased my products outside the complex at the expo. I wanted to spread the message that plastic will cease to be a menace if handled with care.

"Awareness is spreading and change is taking place. Looking broadly, a visitor might see plastic and filth strewn all over, but if you look closely you will be able to see the steps people are taking to control it. One has to take into consideration that a part of our population is struggling to earn two meals a day."

Certainly, Rita's commitment is absolute. As she puts it: "Walking the talk is the best way to set an example." Everything gets upcycled in the Maker household – not just plastic, but also dresses. Rita will crochet a new bag from an old and tattered sari or make dresses from left-over cushions and bedspreads.

Such sustainability is epitomised in the Hindi phrase that heads the home page of her website and has become a guiding light for the cause: 'Jo plastic ghar aaye kutchh bunkar baahar jaaye', meaning 'Whatever plastic comes home should go out as a product'.

### A small-scale model

None of Rita's products are available for sale. It would kill the essence of the move, she says, which is to show a small-scale recycling model achievable for anyone.

"It is for both women or men who are sitting at home and wanting to do something with their time. Not everyone can set up an industry to recycle plastic, but upcycling is something that anyone, if they have the will, can do. We have created the problem and the onus lies on us to solve it."

To watch Rita's videos, visit [ritamaker.com](http://ritamaker.com)



## Soumya Annapurna Kalluri

As a student working towards her degree in mechanical engineering, Soumya Annapurna Kalluri admits she was part of the throwaway culture, giving little thought to what she bought and disposed of in the bin. The 27-year-old woke up when she entered the workplace and was part of the team on consumer conglomerate Godrej & Boyce's upcycling project.

She was moved to go it alone as an entrepreneur and set up her own social enterprise to combat the waste produced by the notoriously fickle world of fashion, which creates around 13 kg of fashion waste for every person on the planet every year.

She saw a way in with denim – a staple in most people's wardrobes, but also in most landfills – which is a durable fabric and, she believed, could be upcycled to make trendy and multipurpose bags and jewellery.

The result is Dwij, which literally means 'twice born' and which has, so far, given a second life to 3,000 pairs of jeans and 500

metres of post-industrial denim fabric. The enterprise has been able to produce over 2,500 recycled items such as bags, clutches, pouches and accessories, available to buy on its website.

Soumya's team choose their materials carefully and put them all through an industrial wash before they're cut and designed. Each item is fresh and funky-looking and comes with a tag naming the tailors who have made and designed the product for that personal touch.

### Zero waste organisation

Soumya says: "We strive to be a zero waste organisation and an ethical brand." Unlike in her student days, nothing goes in the bin mindlessly. The shredded pieces of waste generated while making the products is further used to make small items such as accessories and jewellery.

In the future, Soumya has plans for Dwij to expand to create other utility products like school supplies and yoga mats.

To browse and buy the range of products available, visit [dwijproducts.com](http://dwijproducts.com). The site also has information on how to donate your own waste denim to the project.



Personalised - each Dwij product comes with the name of the artisan who made it

