THE WEIGHT OF CLOUD KITCHENS
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In the state of Karnataka, a Plastic Ban issued in 2016 notified a complete and total ban on all plastic and thermocol products in the state. The notification stated that "no shopkeeper, vendor, wholesale dealer, retailer, trader, hawker or salesman would use plastic carry bags, plastic banners, plastic buntings, flex, plastic flags, plastic plates, plastic cups, plastic spoons, cling films and plastic sheets for spreading on dining table irrespective of thickness including the above items made of thermocol and plastic which use plastic micro beads." The notification also bars manufacturers from producing, storing, supplying or transporting plastic products. Despite the many fines collected and the seizure of great amounts of plastic being illegally used, the ban has not operated uniformly.

Cloud kitchens, a recently growing phenomenon in the food and beverage industry in Bengaluru, pose a particularly pernicious problem in not being locatable, since they don't operate a storefront. Cloud kitchens are delivery-only restaurants with a full production infrastructure and their own chefs and menus. These outlets solely produce food, ordered either through an app or a website, without offering dine-in facilities, making it harder for government authorities to monitor the plastic packaging and utensils delivered to the customer with each meal.

We decided to investigate the quantity of plastic waste generated when ordering a meal from 15 cloud kitchens in the city. We were unpleasantly surprised that these 'online' establishments with easy to navigate web interfaces and swift services are heavy users of plastic despite the government's ban.

Our examination showed an average of 67.072 grams of waste generated for each order of a meal for one person in the price range of Rs. 200 to Rs. 300. Typically, 46.89 grams of non-biodegradable waste and 33.62 grams of biodegradable waste were generated across all orders.

What is terrifying is that this investigation (since it looked at only 15 platforms) forms only a microcosm of the scale

1 Circular – Ban of Plastics & Penalty impose in Bruhath Bengaluru Mahanagara Palike

Rank	Cloud Kitchen	Date	Biodegradable Waste Generated (in grams)	Non-biodegradable Waste Generated (in grams)	Total Waste Generated (in grams)
1	Puh se pizza	18.06.17	118.27	65.43	183.7
2	Inner Chef	15.06.17	65.62	35.26	100.88
3	Baba da Dhaba	19.06.17	23.03	68.46	91.49
4	Bowl Company	05.07.17	36.14	47.85	83.99
5	Fresh Menu	14.06.17	11.55	70.16	81.71
6	High n Hungry	20.06.17	4.03	66.26	70.29
7	Box8	29.06.17	12.12	52.78	64.9
8	Hunger Hitman	21.06.17		53.62	53.62
9	Nite Out	21.06.17		46.33	46.33
10	48 East	16.06.17	3.56	41.4	44.96
11	Faasos	28.06.17	28.32	14.6	42.88
12	Chefkraft	22.06.17		39.25	39.25
13	Kick Out the Jams	17.06.17		37.62	37.62
14	InBento	23.06.17		35.32	35.32
15	Birinz	20.06.17		29.14	29.14

that we might estimate. With a reduction in dine-in customers and corresponding increase in home delivery across the city, the growth of waste production by this new generation of companies in the food and beverage industry gets magnified. In fact, foodpreneurs find operating an online kitchen a more economically viable business model than running a restaurant because they can skip high rental costs, and people who love to dine out often find cloud kitchens a way of eating restaurant food in the comfort of their home with the plus of being able to skip the city traffic.

Without better implementation of the ban, widely available sustainable alternatives to plastic, and the rise of community and customer awareness to significantly drop its usage, the barrier toward a cleaner and 'greener' tomorrow seems insurmountable.