



CAG'S 2022 BRAND AUDIT

PACK IT IN

BRAND AUDIT 2022 Citizen consumer and civic Action Group

PACK IT IN: CAG's 2022 BRAND AUDIT

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About CAG

Citizen consumer and civic Action Group (CAG) is a 37 year old non-profit and non-political organisation working on citizen rights and good governance. It has worked primarily to protect the interests of consumers and citizens of Chennai even as its efforts have had state level and even national level impacts.



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BRAND AUDIT 2022

Executive Summary

The spotlight at the international stage is finally on plastics with the United Nations Environment Assembly endorsing a resolution to develop a legally binding international instrument on plastic pollution - a Global Plastics Treaty. While finalising, ratifying and actually implementing such a treaty will take time, it is a sign of the importance accorded to plastic pollution and its impact on the planet and humans.

The treaty, one hopes, will highlight the need to go beyond the end-of-life solutions that have been championed by manufacturers and governments for years. End-of-life solutions like waste-to-energy, do not actually solve the problem of plastic pollution and come with their own environmental and health hazards. Recycling can only be considered a short term measure. The only true solution is to turn off the tap of plastic production and promote sustainable alternatives.

As the world gathered at the 27th Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC), it was disheartening to note that the contribution of plastic waste to the climate crisis was not adequately acknowledged. Till date the onus continues to be on the consumer to be responsible and Reduce, Reuse, and Recycle. However, with plastic pervading every nook and corner of human life, it is impossible for a consumer to reduce her plastic consumption. It is also unfair to place this burden on the consumer's shoulders. The manufacturers who choose to pack their products in plastic must be held liable for the waste produced at every stage of the product's life cycle. This concept of Extended Producer Responsibility (EPR), if implemented well, can go a long way towards shifting the packaging industry towards sustainable alternatives.

Brand Audit is a citizen-science effort to highlight the role of such manufacturers in plastic waste production and to demand they be held accountable. The Brand Audit, in its 5th year, is a global effort anchored by the Break Free From Plastic movement. CAG has been a part of the Audit since its inception and was instrumental in developing the methodology.

CAG's 2022 Audit reveals that the top polluters are Unbranded and local brands followed by Britannia. Tied in third place are Aavin, the Tamil Nadu state milk supply cooperative and ITC. Unbranded plastics, for the second year running topped the chart. More than three-fourths of the plastic waste audited was marked 7 - Other indicating that the plastic packaging was made of more than one type of plastic or was a combination of several layers of materials (plastic, cardboard, paper, etc). Such multi-layered plastic (MLP) is not recycled and has low value in the plastic recycling industry. MLP constituted 60% of the plastic waste audited. This should serve as a clarion call for manufacturers to invest in sustainable alternatives.



Background

The problem with plastic

Plastics, a relatively recent human invention, have pervaded every aspect of the human experience - from the toothbrush to life saving gadgets. In the space of 150 years (the first plastic product was patented in 1862), and particularly in the last 60 years, plastics have become commonplace. The twin qualities of durability and flexibility (to be moulded into a required form) along with its inert qualities have made plastics invaluable in a range of applications. This durability has also made plastics a major environmental problem. Plastics are now known to last for centuries in the environment, slowly breaking down into smaller pieces, leaching toxins into the environment, and polluting the air, water, and soil. With the plastic industry (a by-product of the fossil fuel industry) poised to continue its rapid upward growth for the foreseeable future, the safe and appropriate disposal of plastic has become a focus area for governments, not-for-profit organisations, and citizens.



Plastics - toxic from inception to eternity

In the past few decades, globally, governments and non-profits have mooted the concept of Reduce, Reuse, and Recycle. This approach though is targeted at consumers, requiring them to actively seek to reduce their plastic consumption, and in the event of not being able to avoid plastic,



to reuse or recycle. While in theory this seems sound, the fundamental dilemma facing a consumer is that almost every product purchased comes encased in plastic. That then leaves the conscious consumer with the options to reuse or recycle. Of these, recycling is often promoted as a great solution, with companies and governments claiming to collect and recycle plastics. Yet global figures for recycling stands at a measly 9%. Recycling is plagued by poor infrastructure; and the need for virgin plastic to be added to recycle plastic. This makes recycling a zero sum game that only provides a facade of making a positive impact. The remaining 91% of plastic is either incinerated (12%) or dumped in the environment in landfills or dumpyards. The fundamental flaw with current systems of handling plastic waste is that they seek to deal with the waste and not actually address the source of the problem, i.e. the production of plastic.



Fig 1: Greenhouse gas emissions - global to local

Plastics and climate change

Plastics are a byproduct of fossil fuel extraction which is a highly polluting, carbon intensive industry. Greenhouse gas emissions (GHG) from plastics is estimated to be 0.86 $GtCO_2e$. Other estimates suggest that emissions from the production, use, and disposal of fossil fuel based plastics will grow to 2.1 $GtCO_2e$ by 2040 accounting for 19% of the global carbon budget.

Estimates of GHG emissions from plastics at the country or state level are non-existent. However, according to the Government of India, the country

produces 3.5 million tonnes of plastic waste annually. If global annual emissions are 0.86 GtCO₂e and global plastic production is 374.8 million metric tons, then India produces 7.98 million metric tons CO₂e of GHG emissions from plastic waste each year. Similarly, Tamil Nadu produces 431,472 tons/year of plastic waste, according to the TNPCB report for 2019-20, so the state's plastic waste alone is responsible for 0.98 million metric tons CO₂e annually.

At a more local level, as per the Greater Chennai Corporation's estimates, Chennai city produces about 0.16 million metric tons of plastic waste annually. The GHG emissions from this would amount to about 0.36 million metric tons CO₂e. While calculating carbon equivalents and trying to quantify the GHG produced is essential to put in place targets and so on while attempting to tackle the climate change conundrum, it is also important to see the big picture. Plastics, as mentioned before, are polluting at every stage of their life cycle - extraction, processing, use, and disposal. They contribute in complex ways to impact planetary and human health.

Since fossil fuels are formed by compression of ancient forests and animals under extreme pressure, these are typically found deep in earth, often below pristine forests. Mining, whatever the method, ruins the natural environment. This again contributes to more greenhouse gas emissions as these forests then can no longer function as carbon sinks. The loss of forests also means that numerous plants and animals are affected; there may be species that are limited in their range and therefore the destruction of a forest area might mean their extinction. This destruction then also means that the climate of the region will change, rainfall patterns change, the way water drains (or stagnates) will change. This will lead to greater frequency of extreme weather events (floods, droughts, cloud bursts, sudden heavy rains as witnessed in 2015 in Chennai) that can have devastating impacts on agriculture, health, and infrastructure. With forests being destroyed, people encroaching on forests (including for industrial growth), climate patterns affecting food access for wild animals, the frequency of interactions with wild animals will go up and with that the chances of diseases jumping across the species barrier (think more diseases like SARS and COVID19). This is in addition to health impacts of ingesting plastics (through microplastics in the air, water, and food chain). In short, the biological, chemical, and physical cycles of the natural world are altered drastically and not in a good way. All of this affects us humans as our health is compromised, the water we drink and air we breathe are polluted, and the plants and animals on which we rely for food and medicines are impacted.



Plastic future

Under business as usual scenarios, our future looks to be more and more uncertain. Climate change is inexorably driving the world to a bleak future of extreme weather events, food shortages, fuel shortages, not to mention devastating epidemics and pandemics.



Humankind faces an uncertain future

Plastic waste's contribution to climate change is growing rapidly and must be addressed immediately. Efforts to recycle and reuse plastics have met with limited success. The negative fallout of climate change hits the poor, underprivileged communities the most as they do not have the resources to adapt to and mitigate the impacts. Considering that their GHG emissions are much less than affluent communities/societies, their contribution to

climate change is miniscule, yet they bear the brunt of it.

Clearly, the only sustainable, just solution is to reduce the production and use of plastic; to turn off the tap. For this we need governments, manufacturers/industry, and citizens to come together.

Why a brand audit?

A Brand Audit attempts to identify the top plastic polluter companies through a waste audit by collecting plastic trash in a sample area and analysing the data in terms of manufacturer, type of plastic, recyclability, purpose of use, etc.

The Brand Audit was originally designed and developed by Mother Earth, Greenpeace Philippines, GAIA, and CAG in 2018. It is a citizen science initiative led by BFFP which has subsequently spread across the world with 440 brand audits conducted across 45 countries in 2021 alone. The brand audit aims to shed light on the gravity and magnitude of the issue of



Brand audits are one way of holding manufacturers accountable

plastic pollution and illuminate the need for an immediate, methodical and sustained action by all stakeholders, especially the manufacturers.





Methodology

The CAG Brand Audit 2022 was conducted on the N4 beach in North Chennai for a length of up to 300m.

Brand audit participants were trained by CAG in data collection and data entry processes. Data collection consisted of collecting all plastic waste in the N4 North Chennai beach from 6am to 10am and sorting the plastics by brand/manufacturer. Participants were provided with safety equipment during data collection.

Participants were provided with the brand audit toolkit which familiarises them with the data collection and entry tools and processes. The questionnaire was based on the format set in 2018 with some minor modifications necessary to accommodate Indian contextual conditions. This data was then logged via an online application, KoboToolBox which enables the user to develop customised questionnaires. KoboToolBox was selected for its ease of use/ convenience since it doesn't require the internet during data entry and it is only required at the time of sending the final data.

Once the data was logged, the brand names and their parent companies were cross checked online and against BFFP's master list of companies.





Brand Audit 2022 volunteers at work



Limitations

The field site (N4 beach) is used as a public convenience by local communities due to poor sanitation facilities in the neighbourhood. The data collection, perforce, had to be restricted to a 300m stretch. This impacted the quantum of waste collected.

The brand audit results can vary by geography - indoor or outdoors. This often impacts the kind of plastic found as indoor audits tend to have a mix of food packaging and household products, while outdoor audits predominantly see food packaging, particularly fast food and snacks. The socio-economics of the location also impact the plastic type found. Beaches in low income areas (which this one was) see more multilayered plastics, unbranded plastics, etc. A similar plastic profile was seen in the 2020 and 2021 indoor audits where participants were of a specific income group and/ or they lived in rural areas or small towns.





Brand Audits over the years 2018 - 2022







Results

Top polluters

The polluters who secured podium positions in this year's brand audit are Unbranded/local items items (29.97%), Britannia (23%), and Aavin, the Tamil Nadu state milk supply cooperative and ITC tying for third place at 6%. The other polluters who made the top 10 list are PepsiCo, Daily Fresh Fruits, Godrej, Groupe Lactalis, Unilever, and Tata in that order.



Unilever which was top polluter in 2018 and came second in 2020 and 2021. saw a drastic drop to 6th place in 2022. However, Britannia has consistently stayed in the top 5 as has Aavin. It is interesting to note that top honours in 2021 and 2022 was taken by unbranded/local items.

What were the plastics used for?

For the last 3 years, including this year's brand audit, the most amount of plastic waste has been from food packaging. Not only has food packaging occupied the top position but the percentage of this plastic waste has been steadily increasing - from 57% in 2020 to 62% (2021), to 82% in 2022. The second highest category this year was household products, followed by packaging material, and personal care products at 6.1%, 5.8% and 3.2% respectively. This trend is similar to last year's audit with food packaging



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topping the charts and personal care and household products trailing at 2nd and 3rd place.

The change in location of the brand audit - from indoors to outdoors - could be responsible for the preponderance of food packaging in the brand audit.

Fig. 3: FMCG brands were the most represented group in our beach brand



Plastic composition

In the process of determining the composition of types of plastic collected, it was found that an enormous amount (76%) belonged to the "Other" (7) category, implying that the sample either comprised multiple types of plastic or did not bear any information mentioning the type of plastic used. This category topped the list in the 2021 Brand Audit as well. The second highest type of plastic found was LDPE constituting 14%; a slight increase of 2% from last year. The third place was tied between PET and polypropylene (PP), both contributing 3.58%. The sample collected was found to contain only a minimal amount (1.63%) of HDPE. In comparison to the 2021 Brand Audit, PP, PET, and HDPE were found to be lesser in percentage in this year's audit.



Fig. 4: Types of plastics found in the audit

Non-recyclability of plastics

Data analysis was done to identify the amount of recyclable and nonrecyclable plastics in the sample collected. In India, PET (1), HDPE (2), LDPE (4), and PP (5) are easily recyclable. However, a large percentage of the

sample was non-recyclable, largely consisting of 7-Other plastics. The main brands contributing to this were Britannia, Unbranded, PepsiCo and ITC. It is pertinent to note that Britannia's non-recyclable plastic composition was 98% last year, which is now 100% non-recyclable. ITC, Unilever and Tata were also 100% non-recyclable while the unbranded items were 78.26% non-recyclable and PepsiCo was at 93.3% (a significant jump from last year's figure of 67%). Some of the other top 10 polluters such as Daily Fresh Fruits Co., Groupe Lactalis, and Godrej consisted of 66.67%, 12.5% and 12.5% of non-recyclable plastics respectively.

In terms of recyclability, Aavin, the 3rd largest polluter in the sample, did not have any non-recyclable plastics. This could be because the Aavin products found on the beach were largely milk packets which are made of LDPE.



Fig. 5: Non-recyclability of plastics by brand



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Multi-layered plastics

Multi-layered plastics (MLP) is the most difficult type of plastic waste to recycle not just in India but all over the world because it contains multiple layers of different kinds of plastic along with other foil like materials which are held together by adhesive bonding which makes it difficult to separate the layers for recycling. In this year's sample, MLP constituted 60% of the total plastic waste collected. Britannia tops the MLP chart with 38% followed by unbranded items at 22.4%. Some of the other brands using MLP packaging are PepsiCo, ITC, Haldiram's, Arusuvai Foods, Tata, Unilever, Sakthi Masala, and Perfetti van Melle, which constitute about 30% of the total.



Fig. 6: Top producers of multi-layered plastics

Smoking litter was found to be miniscule in this audit - a surprising finding since cigarette butts have been the dominant plastic found on beaches in the last 30 years.

5 years of Brand Audit

2022 being the 5-year anniversary of the global Brand Audit, an overview of the results of all the audits done so far by CAG was undertaken. However, CAG was unable to conduct a Brand Audit in 2019 and so only four years of data was looked at. Some brands, as expected, consistently stayed in the Top 10 and some even held their positions in the Top 3 polluters. In total, 22 brands made it to the Top 10 in the four years - 2018, 2020, 2021, and 2022. Of these 22, Unilever, Britannia, ITC, and Aavin featured in all four editions; Procter & Gamble and PepsiCo were present for 3 years (in the Top 10); and unbranded, Groupe Lactalis, Nestle, and Hatsun showed up in 2 years. The remaining 12 brands registered in the Top 10 only in one year or the other.

Unilever, Britannia, and Aavin stayed within the Top 5 in all years. In 2021 and 2022, a new contender for top position entered - unbranded local plastics and local manufacturers.

The category of '7- Other' plastic constituted 76% in the 2022 Brand Audit and it has been increasing steadily over the last two years. Brand Audits 2020 and 2021 showed similar trends with '7- Other' constituting 67% and 48% of the total plastic waste found, respectively. The heterogeneity of '7-Other' plastics and the absence of clear information on the composition of plastics makes it almost impossible to recycle this category especially in India.











Fig. 7: Polluters that have consistently featured in our brand audits.

Conclusion

Role of manufacturers in tackling plastic pollution

A study of the corporate sustainability reports of the top 60 companies in the Food & Beverage sector has revealed that a majority of companies do not directly address the issue of plastic pollution caused by them and refrain from using words such as 'waste' and 'pollution' but instead emphasise on 'the need to tackle global crisis'. They make vague statements about their proposed commitments rather than reporting on the actions taken by them. Of the 60 companies in the study, only 6% recognize packaging waste as the company's responsibility.



There is no solution to multi-layered plastics

It is important that companies understand that Extended Producer Responsibility (EPR) is not just corporate social responsibility but rather a legal obligation with consequences.

Manufacturers have tended to focus on end of life and post consumer solutions through activities like beach clean ups and awareness campaigns rather than dealing with the source of the problem. These manufacturers flood the markets with single-use plastics, often in the smallest packaging sizes possible such as sachets, which increases the amount of MLP waste produced. Companies need to make conscious and concerted efforts to redesign their packaging to be sustainable and assume responsibility for the plastic waste generated from cradle to grave by taking source control measures instead of relying on post-consumer and end-of-life solutions that are unsustainable. Post-consumer solutions, if any, should be focussed around developing refill ecosystems that are affordable and accessible.

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Legislative and regulatory frameworks

Although the Government of India has taken commendable steps in introducing Extended Producer Responsibility (EPR) for plastic packaging in 2022 and setting up a Centralised EPR portal to ensure better transparency and accountability, the Central Pollution Control Board (CPCB) should publish real time data of plastic waste generation and collection of each registered company to continuously monitor the fulfilment of the EPR targets and to enable the public and CSO networks to access that information as well.



The burden is on consumers

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Policy gaps

India's Plastic Waste Management Rules, 2016, in Clause 9 (3) called for the phasing out of some MLP sachets within 2 years from 2016. Subsequently, India brought an amendment in 2018 which limited the phasing out to MLPs that are non-recyclable, or non-energy recoverable or with no alternate use. Since all plastics including MLPs can be burned to recover energy, albeit with low calorific value, this amendment can easily be construed to render the call for phase-out of MLPs ineffective.

A 2011 study by Lithner et al, suggests that globally more than 100 million tonnes of MLP are produced annually. More recent data, from 2017, says that plastics used for packaging accounts for 146 million tonnes annually (the biggest sector by use).

MLPs have found their way into hundreds of household and food and beverage products; and this dependance is only likely to grow with time. It is time that governments and manufacturers wake up to the real magnitude of the MLP problem, and work to curb it.

Collective international action

In 2018, under the aegis of the Ellen MacArthur Foundation, a number of manufacturers signed the New Plastic Economy Global Commitment to bring circularity to the plastics sector. The Commitment set targets for 2025. The recent 2022 progress report brings dismal news that these targets are highly unlikely to be met. The report notes that the target of achieving 100% reusable, recyclable or compostable packaging by 2025 will 'almost certainly' not be achieved and worryingly there is an overall increase of virgin plastic use back to 2018 levels.

Recent efforts to develop an international, legally binding agreement on plastic pollution have gained traction. In November 2022, an Intergovernmental Negotiating Committee met for the first time to develop an international legally binding instrument on plastic pollution by 2024. This is a commendable step since all international agreements on plastic pollution thus far have been voluntary and therefore unenforceable. But mere signing and ratifying a Global Plastics Treaty will not translate into action unless each member State enacts suitable domestic measures and ensures its implementation to that effect. Therefore, it is ultimately incumbent upon the governments in power and corporations to find a way forward.



Making a plastic-free world a reality

There can be no climate action without ending plastic production

Each stage in the life-cycle of plastics, starting from raw material production to end product consumption and disposal, contributes to GHG emissions and thus to climate change. Hence they can never be produced, used and disposed of sustainably.

To combat plastic pollution and thus mitigate the impacts of climate change, manufacturers need to step up and take responsibility for the plastic waste they produce and implement sustainable solutions instead of peddling the myth of waste to energy. Governments need to be proactive in putting in place strong legislation that protects the consumer and the environment; hold manufacturers accountable and ensure the law is implemented and enforced; and develop a strong alternatives ecosystem. And finally, consumers need to work with the government to reduce their plastic use.



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