MICROFIBRES, THE THREADS OF PLASTIC POLLUTION

Our synthetic apparels shed minute fragments of plastics that can escape into the ocean and potentially enter the food chain.

New Delhi: Synthetic clothing is a huge contributor to microfibre pollution, reports a new study titled “Dirty Laundry: Threads of Pollution – Microfibres” released today by an environmental group, Toxics Link. The new report, which has looked at global studies across the globe, highlights that 124 to 308 mg of microfibres is released per kg of washed fabric during washing, depending on the type of washed garment. The study has also reported that synthetic textiles add approximately 35 per cent to the global release of primary microplastics to the world's oceans. Apparel made of synthetic materials like polyester, acrylic, nylon, and others consists of plastics and denote around 60 per cent of the clothing material globally. The study raises serious concern regarding microfiber pollution in India, especially as synthetic apparels are capturing substantial market shares in the country.

Microfibers released during washing and use of synthetic clothing end up in the water bodies, thus polluting them. In an earlier study done by Toxics Link, a high percentage of microfibers were found along the Ganges River in samples collected from Kanpur, Varanasi, and Haridwar. In another study done by Toxics Link, water samples from the Goa water treatment plant were found to have around 37 per cent of microfiber concentrations.

Microfibres are a type of microplastics with a size below 5 mm. The primary sources of microfibres entering the environment include domestic laundering, textile and tyre industry and fragmentation of larger plastic, including pet bottles and fishing nets. Microfibre pollution can significantly impact the environment and human health due to its minuscule size and capacity to penetrate different ecosystems. When ingested, these particles can induce chemical leaching in the body, further disrupting the immune system and nervous system, causing congenital disabilities and further tissue damage.

“Though PET bottles to yarn are touted as a great environment-friendly option, these plastic yarns also add to microfiber pollution. The washing machines we use at home do not contain any filtration system that can filter microfibres. Thus, microfibers can easily pass through it and through the drainage system to reach rivers and the oceans, adds Ms Priti Banthia Mahesh, Chief Programme Coordinator, Toxics Link. Globally technologies are being developed and are now available, such as washing machine microfibre filters and microfibre capturing devices that can filter microfibres to prevent them from releasing into the water channels. But in India, there has been little effort in this direction.

Countries like France and the USA have mandated brands to mention the presence of synthetic material and how it will leach microfibre pollution. The upcoming Plastic treaty is also likely to discuss and address this form of microplastic pollution. However, there needs to be active research on this form of microplastic pollution. Satish Sinha, Associate Director, Toxics Link, added, “It is imperative to bring together key stakeholders and institutionalise ways to curb plastic contamination across the textiles value chain.” Sustainable, eco-friendly alternatives such as natural materials for clothing should be used, promoting nature-based entrepreneurship in the country.”

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About Toxics Link:
Toxics Link is an Indian environmental research and advocacy organisation set up in 1996, engaged in disseminating information to help strengthen the campaign against toxics pollution, provide cleaner alternatives and bring together groups and people affected by this problem.

Toxics Link’s Mission Statement – “Working together for environmental justice and freedom from toxins.”
More: www.toxicslink.org