

Rising danger of plastics

What is the issue?

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- \bullet UN Environment Programme's Clean Seas Campaign called for a global ban on microbeads in personal care products. $\mbox{\sc Nn}$
- In India, recently The Bureau of Indian Standards (BIS) has classified microbeads as "unsafe" for use in cosmetic products.
- Increasing use of plastics and especially micro-plastics is developing into a major cause of concern for the environment.
- \bullet It is also getting dangerous as plastics are making way into the food chains of even birds, animals and fishes. $\mbox{\sc h}$

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What are microbeads?

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- Microbeads are **smaller forms of plastic**, no greater in size than 5 mm. \n
- Microbeads are added as an exfoliating agent to cosmetics and personal care products, such as soap, facial scrub and toothpastes.



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 Microplastic sources also include breakdown of discarded bags and plastic packaging, particles from vehicle tyres, synthetic fibres from textiles, etc.

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What are the concerns?

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- \bullet Microbeadsescape the filtration and treatment processes for waste water and end up in sites of nature. $\mbox{\sc h}$
- This is resulting in significant global impacts on wildlife from marine environment pollution.
- World's coastal countries currently do not have the concerned recycling policies nor the technical capabilities, and so large quantities of plastic are not recycled and enter landfill.
- The durable properties of plastics make them persistent and slow to degrade in the environment entering the food chains.
- \bullet It holds the potential for both bioaccumulation and biomagnification. $\ensuremath{\backslash n}$

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What are the desired actions?

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- \bullet Regulations on use of plastics in general and microplastics in particular should be put in place by the government. $\mbox{\sc h}$
- Alternatives should be found to tackle with rising consumerism and the

increasing use of plastic in everyday life.

- \bullet Invention of new, more readily degradable bio-based materials for the plastics could be a way. $\mbox{\sc h}$
- The entire flow chain from manufacturer to the user to the waste collector and the recycling authority should be made aware of the risks.

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Quick Facts

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- **Bioaccumulation** is the accumulation of substances or chemicals in an organism and toxins building up in a food chain. It occurs when an organism absorbs a substance at a rate faster than that at which the substance is lost by catabolism and excretion.
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- Biomagnification, also known as bioamplification, is the increasing concentration of a substance, such as a toxic chemical, in the tissues of organisms at successively higher levels in a food chain.

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Source: The Hindu

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