

## Plastic realities

upi.com

Plastics had their origin in cellulose derivatives. The first synthetic plastic was called bakelite and was derived from fossil fuels. During the Second World War, large-scale production of plastic was directed towards the war effort. However, with the declaration of peace, there was a need to do something about the installed capacity. And so, in 1946, Tupperware company came into being.

At present, the use of plastic has become so ubiquitous that even birds, animals and fish have unwittingly made it part of their diet. Disposed plastic degrades slowly, its chemicals getting leached into surroundings. Further, it breaks down into smaller components over time, entering our food chain and landing up on our plates.

According to a 2014 report of the United Nations Environment Programme (UNEP), “the overall natural capital cost of plastic use in the consumer goods sector each year is \$75 billion”. This will only go up with the rising consumerism and the increasing use of plastic. According to a recent article in *The Guardian*, a million plastic bottles are bought across the world every minute.

However, plastic bottles are not the only problem. There are smaller forms of plastic, no greater in size than 5 mm, called microbeads, first patented in 1972 for use in cleansers. In the 1990s, they began to replace natural material like ground almonds, oatmeal and sea salt in the area of cosmetics. Many cosmetics and toiletry products — ranging from facewashes to toothpastes — use it today. Their abrasive nature lends itself to use in industries such as petroleum, textiles, printing and automobile. An article in the journal *Marine Pollution Bulletin* states that the microbeads are used as exfoliants and that, in a 150-ml bottle, there will be anywhere between 1,37,000 and 28,00,000 microparticles.

The Bureau of Indian Standards (BIS) has recently classified the non-biodegradable microbeads as unsafe for use in consumer products through a draft notification titled, “Classification for cosmetic raw materials and adjuncts, Part 2: List of raw materials generally not recognised as safe for use in cosmetics.”

Countries such as the U.S., Canada and the Netherlands have already put in place regulations to stop the use of microbeads in personal-care products. The sooner India adopts such regulations, the better.

The use of plastic in our daily life should be reduced even as their recycling is increased. This has to involve everyone, from the manufacturer to the user to the waste collector and the recycling authority. We as a society need to create an ecosystem that reduces the use of plastic and prevents its escape into the external environment.

*Samir Nazareth is the author of ‘1400 Bananas, 76 Towns & 1 Million People’*

The new U.S. Fed Chairman is unlikely to opt for policies that might upset the President’s plan

END