

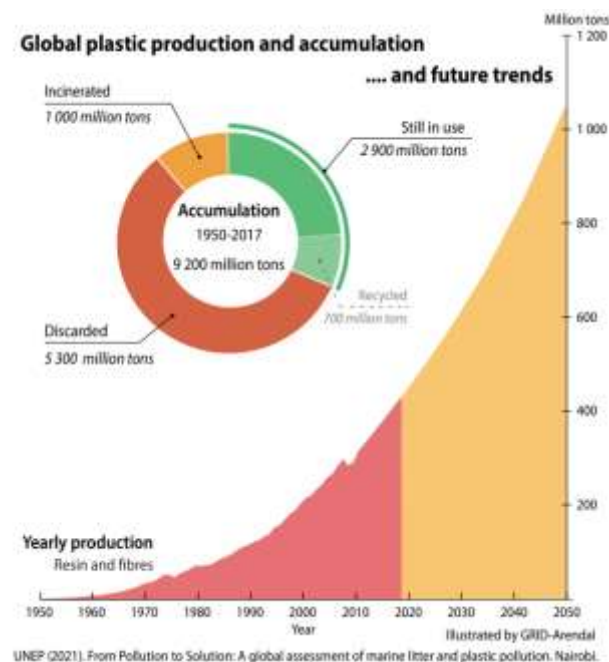


Planet versus Plastics: Call for Action on Earth Day 2024

By Dr. Fasiha Safdar

The theme of the 2024 Earth's Day "Planet vs. Plastics" is a much needed and a long-due call for action on the most pressing issue of today i.e. plastic pollution. Plastic is all around us, from being inside the food that we eat to clothes we wear, from remote mountain tops to deep ocean trenches; plastics and microplastics have become embedded in our environment.

The fact that plastic is not biodegradable adds to the problem: over time plastic does not disappear but breaks down into smaller and smaller pieces known as micro and nano plastics, which accumulate in the biosphere. The figure below (released by UNEP in 2021), depicts the plastic problem in data; out of the 9200 million tons plastic produced since 1950, 5300 million tons has been discarded, which is polluting the different parts of the planet while 2900 million tons is still in use and a very small percentage has been incinerated. Plastics burnt in incinerators releases microplastics and toxic gases into the atmosphere. Production resins and fibres for plastics is projected to keep growing for years in sight. Virtually every piece of plastic that has ever been produced still exists somewhere on the planet.



Over the years, plastic industry and growing consumerism have encouraged the idea that plastics are unavoidable, and they made the public believe that any issues with plastics is centred around the 'trash' problem - an issue which they claim could be overcome if we would embrace recycling. The deeper problem, however, it is just not the trash, it is the health impacts of plastics and their assimilation into our food chain, that is the biggest hazard. A report released by earthday.org titled "Babies vs.

Plastics” has highlighted the gravity of the health issues posed by plastics to human beings, especially babies. The report has stressed the urgency of action on this matter. Studies have found microplastics to be presents in many organs of human body, including lungs and brain. They are now proven to be able to cross the blood-brain barrier and are classified as endocrine disruptors. Plasticizers (substances added to plastics to make them soft and more flexible) such as BPA (Bisphenol A) and PFAS (per and poly-fluoroalkyl substances) have been linked to decrease in memory and learning issues because of their effect on the central nervous system. Studies have found a link between autism spectrum disorder in mice and microplastics. A study has found that kids with attention deficit hyperactivity disorder (ADHD) had more levels of microplastics in their bodies compared to other kids. These facts have rung alarm bells, which must be paid heed to, as the stakes are too high to be ignored. According to Kathleen Rogers, President EarthDay.org;

“Our reliance on plastics could be the biggest gamble in the story of human health, in history. We are all ingesting and inhaling microplastics. They are everywhere. Are we just hoping they are safe, or is even the remotest possibility they might be toxic so terrifying, that we can’t contemplate it?”

The second gruesome impact of plastics is the waste generated by single-use plastic. According to UNEP, we produce about 400 million tonnes of plastic waste every year. Most of this waste lands into the oceans. It is estimated that 75 to 199 million tonnes of plastic is currently found in our oceans, which is deteriorating the marine ecosystem, killing fish and turtle species and adding up in their system to reach human food chain. Fish and other smaller creatures, consume tiny microplastics in our waterways and oceans. When these fish, crustaceans, and sea birds are in turn consumed, the microplastics inside them keep traveling up the food chain, through a process called “trophic transfer”, until they reach us in bioaccumulated form.

In Pakistan, Plastic pollution is visible all around us in the form of garbage lying around, choked waterways and sewerage lines, burning and flying plastic shoppers causing odour and visual pollution. Plastic pollution is the major threat to the marine turtles in Pakistan. Turtles mostly mistakenly ingest plastic bags, which is fatal to their survival, and we regularly hear of such cases in Pakistan where turtles are found dead because of ingesting plastic bags.

The solution to the issue of plastic pollution would start with a complete stop to single use plastic. Governments are key players in the plastic value chain, and they must ban the production of single use plastic. Shifting to circular economy with plastic being circulated in the cycle rather than going to dumping sites, is another area the governments must act on. Responsible consumption is an option that rests with people and we as global citizens have to play our role.

This Earth Day with its theme “Planet vs. Plastic” serves as an opportunity to contemplate our life choices and influence our policy makers to make tough decisions. Earth Day is observed in 192 different countries and has served as a powerful platform

for citizens of the world to send a loud message to world leaders that they care about the environment and that we must make concerted efforts to protect our planet on priority. We, as a responsible nation, need to play a similar role and take ownership of our environment to save the planet and our future generations.

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