Small acts, when multiplied by millions of people, can transform the world – Howard Zinn As the world celebrated the Environment Day, let us all realize that the Earth has the remarkable ability to heal itself, but we must acknowledge that this healing can only occur if we collectively put an end to the harm that we inflict upon it. It's time we rethought about the negative impact that our actions as mankind have had on the environment. The theme of World Environment Day for the year 2023 as chosen by the United Nations Environment Programme, UNEP focused on solutions to plastic pollution under the campaign #BeatPlasticPollution. As the world is facing drastic climate change attributed to human activities, there is an urgent need for a unified response to combat plastic pollution and reduce plastic consumption to safeguard the planet for future generations. Plastic pollution results from the accumulation of plastic objects and particles, including bottles, bags, and microbeads, in the environment. It poses significant risks to humans, wildlife and other ecosystems and organisms that need to be effectively addressed at local governance level and individual level to support technological advancements and innovative strategies. According to the reports for year 2017-18, Central Pollution Control Board (CPCB) has estimated that India generates approximately 9.4 million tonnes per annum plastic waste, and out of this approximately 59% of plastic waste is recycled and 26% of plastic waste is left uncollected or littered. The estimated plastic waste generation in the State of Assam is approximately 2,99,000 kg/ day of different types of plastic waste, while the Guwahati city is generating around 37,000 kg/ day. This pollution has a significant impact on the physical, biological and socio-economic environment of our planet. Plastic pollution is a growing problem with millions of tonnes of plastic waste ending up in our ecosystem, every year. Plastic pollution contaminates the groundwater sources, affecting water quality, thereby causing risks to human and ecosystem health. In addition, accumulation of plastic waste in soil degrades soil fertility and hinders nutrient cycling. The presence of plastic waste in marine and terrestrial environments disrupts food chains and webs as animals mistakenly consume or get entangled in plastic debris. When animals consume plastic debris, they suffer

from the harmful consequences due to the presence of additives in plastics that can absorb toxic chemicals. Micro-plastics, which are tiny plastic particles, is a significant concern as they enter the food chain at its foundation, being consumed by small organisms like plankton and later transferred to larger marine animals. On land, plastic litter accumulation in natural areas affects biodiversity and compromises ecosystem functionality. Plastic waste also results into significant risks to human health due to contaminated food chains resulting from micro-plastics leading to long-term health impacts. The presence of plastic waste in the environment can also result in respiratory issues, waterborne diseases, and other health problems, increasing healthcare expenditures and affecting the well-being of communities. The economic implications of plastic waste can occur due to clean-up and management of plastic waste that may require financial resources. The tourism sector can also be affected, as visitors are deterred by littered landscapes, impacting local economies and livelihoods. To transform plastic pollution into solution, local governance plays a vital role in addressing plastic pollution as a decentralised approach. In a decentralized system, local governments have the advantage of being closer to their communities and can therefore better understand their specific needs and challenges related to plastic waste. To promote an efficient management of plastic waste, state like Andaman and Nicobar Islands have adopted solutions to incentivize the recycling industry by introducing freight exemption policies that provide a 100% waiver on freight charges for transporting waste materials to recycling centres. In the same effort to reduce the environmental impact of plastic waste and promote sustainable infrastructure, some states in India such as Arunachal Pradesh, Chhattisgarh, Kerala and a few others have adopted the practice of incorporating shredded plastic waste into asphalt mixtures for road construction. Urban local bodies are actively collecting and segregating plastic waste by collaborating with informal waste collectors, to channelize plastic waste to recyclers. To address non-recyclable plastic waste, innovative solutions such as co-processing and utilization in cement plants have been implemented. Plastic waste that cannot be recycled is sent to cement plants, where it is used as a fuel source or raw material.

Some states in India have adopted a holistic approach to waste management by categorizing waste into biodegradable and non-biodegradable categories at source. Furthering, the establishment of Material Recovery Centres (MRFs) has played a crucial role in efficient waste management at many states in India by facilitating segregation, processing and recycling of plastic waste, increasing the overall collection efficiency. Collaborative efforts between local bodies, waste management agencies and village panchayats have resulted in the establishment of MRFs and co-processing plants, ensuring effective recycling and disposal of plastic waste across several states in India. Therefore, local government can take a proactive approach in developing and enforcing regulations that restrict the use of single-use plastics, promote the use of eco-friendly alternatives and encourage recycling and waste management practices. Local governments can also play a pivotal role in raising awareness and educating the community about the detrimental effects of plastic pollution through educational campaigns, workshops and events to promote sustainable behaviours and engage citizens in waste reduction efforts. By involving schools, community organizations and businesses, a sense of collective responsibility and ownership can be fostered in tackling plastic pollution. Hence, by implementing people centric strategies, policies and initiatives, decentralized governance can contribute to making a significant impact in creating an environmental sensitive future. To facilitate the government initiatives, environmental psychology provides a range of behaviour change strategies that can be applied to combat plastic pollution effectively. One of the key contributions of environmental psychology is its emphasis on understanding the factors that influence human behaviour and decision-making. Behaviour change strategies can play an important role in influencing the human habits and their response to environmental issues and solving them. Subtle prompts such as strategically placing recycling bins next to trash cans and using visual cues to emphasize the environmental impact of plastic waste, can effectively encourage individuals to make sustainable decisions. Educational campaigns play a vital role by raising awareness and providing practical tips, motivating individuals to actively reduce plastic waste. Incorporating

feedback mechanisms, such as real-time information on plastic consumption, fosters consciousness and empowers individuals to modify their habits accordingly. Moreover, incentives like discounts or rewards serve as powerful tools to reinforce positive behaviours and drive sustainable choices. By incorporating product and environmental design that promotes sustainability, such as easily accessible recycling stations and the use of sustainable packaging materials, individuals should be encouraged to adopt eco-friendly alternatives. In conclusion, through the combined efforts of local governance, environmental psychology, and the active participation of individuals, we can effectively combat plastic pollution and strive towards a cleaner and healthier planet for generations to come.