

# Wildlife, Plastic & Us!!

International Plastic Bag Free Day is observed every year on July 3, a global initiative that aims to eliminate the use of plastic bags which was started by a member of ZWE (Zero Waste Europe) in 2008. But unfortunately, we cannot resolve the problem completely. In 2018, on the occasion of World Environment Day, the World Health Organization (WHO), United Nations sister agencies and thousands of communities and organizations from across the globe celebrated with the theme “Beat plastic pollution” – a call for action for the world to work together to address one of the greatest environmental challenges of our times and raise global awareness for the need to reduce the heavy burden of plastic pollution on people’s health and the threat it poses to the environment and wildlife.

According to the United Nations Development Programme’ official estimates, in 2018, India generated 3.4 million tons of plastic annually which affects not only the environment but also human and wildlife.



Plastic in Elephant dung. © Shiladitya Acharjee.



Waste Management system in Alipurduar Municipality, West Bengal. © Shiladitya Acharjee.

There are two tiger reserves in West Bengal; the Buxa TR situated in Alipurduar District recently came to light for sightings of Royal Bengal Tiger after many decades. Thus, the forest officials took precautionary measures for creating safe habitat in the interiors of the tiger reserve. Of the total 42 villages in the reserve, the state forest department identified 18

villages in the core area to be relocated. As per government official report, this district consumed plastic (annually approx. 250 million tons) which indicates also the usage of plastics inside the reserve & surrounding areas.

This usage of plastic inside the reserve area negatively impacts wildlife, with evidences of wild animals consuming the plastics





**Wastage dump into Core Area of Buxa Tiger Reserve. © Shiladitya Acharjee.**

in the Gorumara National Park, which occupies an area of approx. 126m<sup>2</sup>. At the reserve, plastic carry bags and gutkha packets were found in the elephant dungs. In this matter, Raman Sukumar, professor at the Indian Institute of Science (IISc), Bengaluru, and an expert on elephants said elephants eat garbage and that is how plastics enter into their systems. “I have seen

elephants foraging on garbage outside of Bhubaneswar. The area where these dung piles were seen must have a group of elephants that had been feeding on garbage”, he said. Elephants are attracted to smelly rotten food and it is through this food that plastics get into their system, he added. Dr. Sukumar told that elephants derive a lot of energy from hind-

gut fermentation, a kind of microbial fermentation, but he was not sure whether this process could assimilate plastic (Singh 2019).

Nowadays, plastic is considered one of the biggest threats towards wildlife. If we do not sensitize local communities, tourists and other stakeholders about it now, it could turn into an ecological disorder in wildlife habitats and for wild animals. This will also become a challenge for humans for surviving. Recently, Govt. of India published a notification on Eco Sensitive Zone (ESZ) of Buxa TR, with rules & policies on what needs to be followed in this zone. One of the points is on solid waste management viz., solid waste disposal and management in the ESZ should be carried out in accordance with the Solid Waste Management Rules, 2016, published by the Ministry of Environment, Forest and Climate Change, Government of India vide notification number S.O. 1357 (E), dated 8 April 2016 (MoEF&CC 2016). This says that the inorganic material may be disposed in an environmentally acceptable manner at a site identified outside the ESZ. Alternatively, safe and environmentally

sound management (ESM) of solid waste in conformity with the existing rules and regulations using identified technologies may be allowed within ESZ in certain conditions.

Around 50 villages have been listed in the ESZ of the reserve. Thus, initiatives for proper disposal of solid waste including plastics and maintaining cleanliness of ESZ should be taken by government agencies. Besides, various NGOs and institutions need to come together for awareness generation of local communities on proper disposal of plastics and reusing plastic through beat plastic campaigns. A SWM program for manginging waste generation within this zone should be created. As a result, we will be generating employment in this area by producing eco-friendly items such as recycled plastic products, handicrafts,

eco-bricks, and more. This initiative will help create opportunities for local people. Also, government earns some revenues from this kind of sustainable ways.

#### References

**Singh, S.S. (2019).** 'Elephant dung shows plastic threat is wild', 'The Hindu', 11 January. <https://www.thehindu.com/news/national/other-states/elephant-dung-shows-plastic-threat-is-wild/article25973817.ece>. Accessed on 10.vii.2022.

**MoEF&CC (2016).** The solid waste management rules, 2016 as amended to date. Controller of publications, New Delhi, 41 pp.

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