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Perspective

Note on environmental hazard and plastic

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DESCRIPTION

A global environmental challenge is combating the menace of plastic waste pollution. Plastic pollution is capable of affecting oceans, waterways, and land as a large percentage of land and marine organisms have died due to reason that plastic is non-biodegradable and it affects as hazards to the soil. Toxic gasses are emitted when heated up or exposed. It fills up land space and blocks drainage lines causing erosion and floods thereby on Nigerian roads deterioration is caused to human health, plastic wastes are also harmful, and also they may lead to death due to the harmful acids. In Africa, Nigeria, which is that the biggest oil-exporting country relies mainly on the proceeds of the oil trade for its based strategy and GDP in growing of the economy? However, with the rise within the range of plastic wastes, and declination of oil prices the planet is tending towards sustainable development and energy. Therefore, an urgent requirement for recycling plastic wastes into an answer for wealth creation is prime in Nigeria.

Plastics are not intrinsically harmful or toxic. But carry bags like plastic are manufactured using inorganic and organic additives samples like pigments and colourants, stabilizers, metals, plasticizers, and antioxidants. Pigments and colourants are industrial azodyes that are used to give a bright colour to plastic carry bags. Whereas some of these are likely to contaminate foodstuffs and are carcinogenic if packed in these carry bags. Perhaps heavy metals such as Cadmium is contained in pigments can also reach out and prove to be a harmful health hazard. Under organic esters, plasticizers are of low volatile nature. They migrate the foodstuff as a result of leaching. Plasticizers are also included as carcinogenic. Antioxidants and Stabilizers are organic and inorganic chemicals during the manufacturing process they are protected against thermal decomposition. Toxic metals like lead and cadmium when they are used in manufacturing plastic bags also contaminate and leach out the foodstuffs.

Cadmium when intake in low doses can cause heart enlargement and vomiting. Exposure to lead for the long term may cause degeneration of brain tissues. Plastic bags if not disposed of or destroyed properly they may find their way into the drainage system resulting in water-borne diseases, creating an unhygienic environment, and causing choking of drains. Colored/recycled plastic bags may contain certain chemicals, which can drown to the ground and contaminate sub-soil water and soil.

When recycling may create environmental problems due to toxic fumes generated during reprocessing. Because of units that are not equipped with environment-friendly sound techniques some of the plastic bags which contain leftover food or throw away food or which get mixed up with other garbage are eaten by the stray animals resulting in harmful efects. Because of the impervious nature of plastics, and non-biodegradable if disposed of in the soil, they could arrest or disturb or contaminate the recharging of groundwater aquifers. Further, to improve the properties of plastic products and to inhibit degradation reactions, plasticizers, and additives, fillers, pigments, and flame retardants are generally used, these may cause severe health impacts. The type of plastic which is smooth is Polyethylene terephthalate; it is also relatively thin and transparent.

PET is commonly used during dressing, disposable salad, mouthwash, juice, cosmetics, soft drinks, vegetable oil, water bottles production, and margarine because it is fully liquid. And anti-inflammatory PET is also anti-air, preventing the entrance of oxygen into it. An inorganic compound is, antimony trioxide and it is used as a catalyst for the production of rubber vulcanization and PET. Plastics made from PET must be prevented from higher temperatures so as to prevent the leaching of some toxic additives such as phthalates antimony, and acetaldehyde, the possible human carcinogen is antimony. Normally PET is manufactured for single use only.

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