

**Plastic Reuse, an alternative disposal to minimize impacts on health and environment
(An excerpt of a desk research on reuse of plastics –by CEGGI volunteer)**

Plastics have been long used for food and beverage packaging. The challenge is in their disposal. Most methods of disposal cause very negative impacts to health and to the environment.

After use, research shows that only 9% of plastics gets recycled, while the rest either goes into landfills and the environment or gets incinerated, both of which are associated with great environmental and health effects and contributing to climate change.

Used plastics that are indiscriminately disposed end up in waterchannels causing flooding in the urban areas while the bottles float off into and water bodies (lakes) which is a big threat to aqualife. Others that are collected are damped in land landfills were they also find their way to gardens, blocking water penetration and slowing water circulation for proper plant growth.

Animals are equally in danger as they ingest plastics while grazing.



Plastics in water body



Plastics in landfill



**Grazing animals in danger
of ingesting plastics**



**Burning plastics emits
POPs to the environment**

BURNING PLASTICS IS NOT HEALTHY

Burning plastics releases persistent organic pollutants (POPs) that are harmful to health and to the environment.

The released gases are also known to cause skin rashes, respiratory complication, effects on the nervous system causing headaches, fatigue, weakness, and depression, immune diseases, increased risk of heart diseases, cancer, impact on reproductive and development system.

Plastic Bottle Reuse

People are now getting innovative and devising positive methods to reuse plastics without causing any environmental or health damages. The plastic bottle house and the plastic garden nursery bed are some of the simple methods to reuse plastics.

Plastic Bottle House

Plastic bottles are filled and compacted with soil or any other non-degradable waste. These are assembled as building blocks for the house. The bond between the bottles can be of mud to minimize the cost.



Water tank build from plastic bottles



Plastic bottles filled with soil for use



Plastic house under construction

ADVANTAGES OF PLASTIC BOTTLE HOUSES

- Low cost, easy to use, and re-usable
- Non-brittle, cooling absorbs abrupt shock loads and fire
- Bottle houses are now raising awareness to the public on the alternative methods of reusing plastics
- It is creating employment for many including the youth and street children since it does not require much skills



Plastic bottles for reuse

Plastic Bottle Reuse in the Garden

Plastic bottles and bags can be used in the gardens for nursery plants. The advantage is that these can be reused after transferring the plants to the main garden. The disadvantage is that plastic waste still needs to be collected and recycled and if not collected it leads to ground pollution.



Source:

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0177904>