

SHORT QUESTION

Preparatory Notes

By Dr. Megha Bhengra

What should be the thickness of plastic bags permitted? Why? -5 marks

- The government has notified the plastic waste management rules, 2016 as an amendment/ **modification** of earlier plastic waste (Management and Handling) RULES 2011.
- The minister of state for environment, Forest and climate change, Shri Prakash Javaedkar, stated minimum thickness of plastic carry bags has been increased from 40 microns to 50 microns.
- Therefore, 50 microns or more must be permitted as the thickness of plastic bags.
- This thickness has been aimed to facilitate collection and recycle of plastic waste.
- (**Red coloured word is for understanding**)

Why?

- By increasing the thickness of carry bags and plastic sheets can raise the cost of it by 20%. This will cut down the tendency to provide free carry bags.
- The thinner the bag , there will be higher probability of its breakdown and it will get mixed with soil and marina fauna readily. Plastic being non biodegradable remain in the soil for more than 1000 years contaminating soil and water bodies.
- If plastic is the thicker animal won't consume it directly.

- Light weight plastic bags (less than 50 microns) break down easily and don't easily degrade . As a result , any toxic additives will be released into the environment. They are dioxides and furans which are potent carcinogen. Other harmful gases are sulphur dioxide, oxides of nitrogen, hydrochlorides.
- Many of the toxins directly affects the endocrine system of organisms, which control almost every cell in the body.
- Thinner bags are less efficiently collected, recycled and treated and will possibly result in spread of infections to waste handlers.
- Thinner bags disintegrates faster into smaller pieces which causes problem in segregation from a heap of waste and after a long time its particles settle down in earth which causes problem in percolation of water to fill the water table and increases the contamination of ground water.

- It is difficult for the sanitation workers to collect lower micron bags when compared to higher micron bag leading to littering and clogging of sewage system apart from others problems.
- As the daily wage workers and working under private owned organizations or companies , they are paid on the basis of weight of garbage collected, they prefer to take higher micron film in order to get better money for the day.
- On the other hand , thicker plastic bags more than 50 microns ensures safe collection, storage, segregation , transportation and processing of disposal waste. Therefore less environmental damage and higher production cost will prevent the shopkeepers and business companies to distribute free plastics. Also thicker plastics can be recycled more efficiently.

- Therefore, each carrying bag or multi layered packaging should have name, registered number of manufacturer with thickness for proper monitoring and better management and handling of plastic wastes.