

Toxic Metals in Delhi Vegetables Markets

According to **National Environmental Engineering Research Institute (NEERI) study,** vegetables grown on the **Yamuna floodplain** have been found to contain **high doses of lead**, which, on prolonged consumption, could trigger a range of diseases.

Findings

- The heaviest lead contamination was found in coriander collected from east Delhi.
- **Except for cabbage,** lead levels were found to be above the standard in all vegetables collected from vendors, with the **highest level found in spinach (14.1 mg/kg).**
- While the safe limit for lead in vegetables has been set at 2.5mg/kg by the Food Safety and Standards Authority of India (FSSAI), the level of the metal detected in vegetable samples collected from the floodplain ranges from 2.8mg/kg to 13.8mg/kg.
- The study was conducted in February 2019 by the NEERI and the findings were placed before the National Green Tribunal (NGT) in May 2019.

Background

- Even though only 2% of the Yamuna's stretch passes through Delhi, it receives around 70% of the Capital's polluted water.
- In 2015, the NGT had banned the cultivation of edible crops and fodder on the floodplain saying that such vegetables were highly contaminated. Despite this, the practice continues.
- The source of lead could be industries dealing in automobile parts, batteries, paint and polythene.
 Various kinds of usage of lead-based compounds may also be potential sources.

Health Effects

- Heavy-metal toxicity can lower energy levels, damage the functioning of the brain, lungs, kidneys, and liver.
- They can also damage the blood composition and other important organs.
- Long-term exposure to these metals could even cause cancer.
- Lead poisoning can lead to mental retardation in children.

National Environmental Engineering Research Institute (NEERI)

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