

High lead found in 23% children living close to Yamuna: Study

Chetan Chauhan

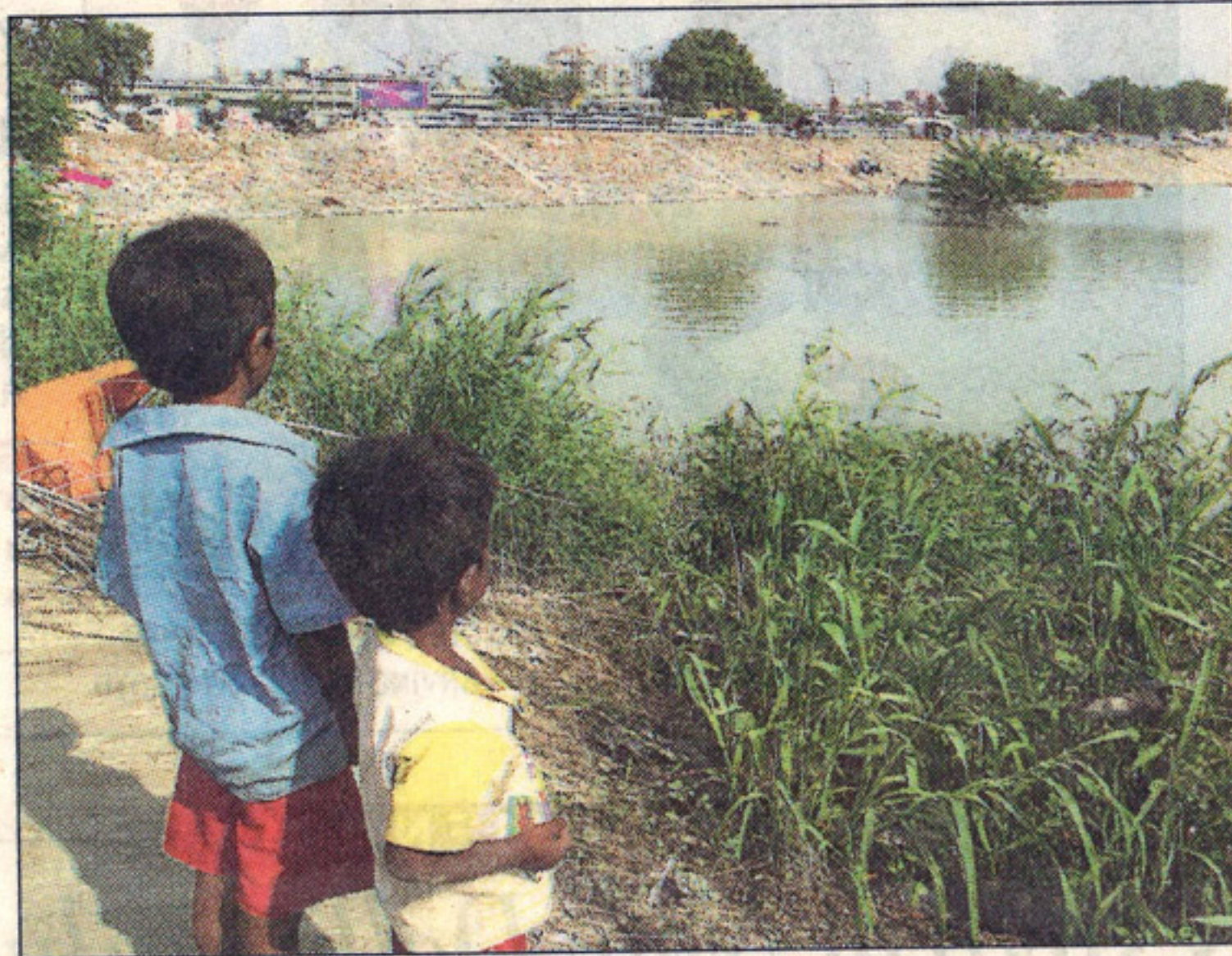
chetan@hindustantimes.com

NEW DELHI: Around one-fourth of children living along Yamuna river in Delhi has lethal amount of lead in the body, courtesy contamination of vegetables grown in the riverbed.

This is despite the government spending crore of rupees to clean and revive the river. A study supported by the United Nations is first to link river contamination with adverse impact on human health.

"Around 23% of children had lead levels in their blood above 10 micro grams — a widely accepted guideline — whose adverse health effects have been noted," said a study conducted by The Energy and Resources Institute (TERI) with support of United Nations Children's Fund (UNICEF).

The study said high level of lead in blood was eight times more when exposed to the river-



■ The study found that children were exposed to hazardous material through vegetables grown in the Yamuna riverbed. RAJ J RAJ/HT FILE

bank after Wazirabad in north Delhi compared to rural areas upstream in Haryana, where river water contamination was found to be less.

Heavy metals such as lead are absorbed by children more readily compared to adults. "Lead exposure may impair motor skills, contribute to onset and development of hypertension and may even result in slow cognitive development," the study based on urine samples

of those living around the riverbed area said.

Water and soil samples were lifted every 2 km starting from Wazirabad barrage and covered 22 km of the river in the Capital. Samples were also taken from Ballabgarh districts in Haryana to compare the level of contamination.

The presence of heavy metals increased after Wazirabad even though every drop of water that flows in the river in Delhi

has to be cleaned through Sewage and Affluent Treatment Plants. Presence of heavy metals was negligible in Haryana.

A heavy metal, hexavalent chromium, said to be hazardous was found to be highest (35 milligram in a kilogram of soil) at Old Yamuna Bridge and Indraprastha Estate Power Plant, where one can see vegetables been grown in the riverbed. They were higher than the international standards for heavy metals in agriculture soil, the study said.

"The plausible reason could be that the river receives large amount of drainage from industries located in Delhi as well as in the neighbouring states at these locations... industrial activities involving metal alloys, coal and oil combustion contribute to these high levels," the study said.

Presence of heavy metals in soil was entering the food chain through the vegetables such as spinach grown in the riverbed in Delhi.

In some downstream areas near Indraprastha Estate Power Plant the toxins were 40 times higher than Wazirabad, the study said.

About time. Not only is it a calm, lucid, clean judgment full of common

VIKRAM SETH
author