Uranium, metals make Punjab toxic hotspot

Chemical, Radiation & Biological Toxicity Rampant, Says Study

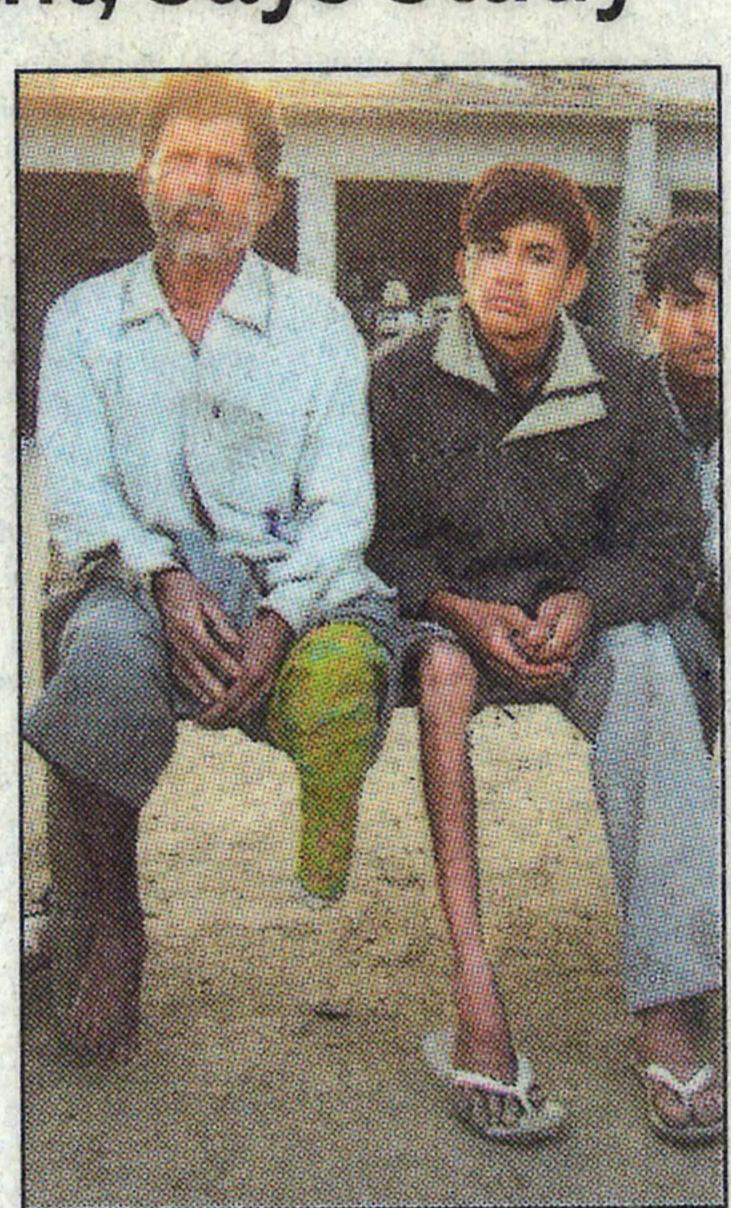
Balwant Garg | TNN

Bathinda: After discovery of high levels of uranium in hair samples of a large number of mentally retarded children in Punjab's Malwa region last year, another study suggests Punjab has become a hotspot of environmental toxicity of multiple types.

While a top German laboratory revealed that hair samples of 80% of 149 neurologically-disabled children, mainly from Malwa region, had high levels of uranium, a study by Greenpeace suggested that all the three major types of toxicity—chemical, radiation and biological—are rampant in Punjab.

The adverse health effects on plants, animals and humans are visible and some of the studies have proved this. "It's clear that Punjab is in a deep ecological crisis with its ramifications on socio-economic and cultural aspects of its population," said Dr Reyes Tirado, a scientist from the University of Exeter in the United Kingdom, who conducted the study in 50 villages in Muktsar, Bathinda and Ludhiana districts last year under a Greenpeace Research Laboratories investigation.

The study found the effects of synthetic nitrogen fertilizers in groundwater in agriculture-intensive areas in three districts of Punjab. It showed that 20% of all



LURKING SCOURGE: Victims of toxicity in Malwa. Punjab is in an ecological crisis, says Dr Tirado, who conducted the study in 50 villages

sampled wells have nitrate levels above the safety limit of 50mg of nitrate per litre, established by WHO.

"Nitrate pollution is clearly linked with the use of synthetic nitrogen fertilizers. The higher the application of nitrogen (urea) in fields, the higher the nitrate pollution found in drinking water from nearby well," said Reyes.

Among villages with high levels of nitrate pollution in drinking water is Doda, a village of Gidderbaha, the constituency of Punjab's finance minister Manpreet Badal.

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