

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No.1093/2024

News Item titled "Study finds wide variety of nitrogen-use efficiency in Indian rice varieties" appearing in The Hindu dated 11.08.2024

Date of hearing: 23.08.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Applicant: None appeared

ORDER

1. This original application is registered *suo motu* on the basis of the news item titled "Study finds wide variety of nitrogen-use efficiency in Indian rice varieties" appearing in The Hindu dated 11.08.2024.

2. The news item relates to wide variations found among popular varieties of rice in India in their ability to use nitrogen. As per the article, this knowledge can be used to develop newer varieties that use less nitrogen and are high-yielding, thus slashing expenditure on imported fertilizers and reducing nitrogen-linked pollution.

3. The news article states that Cereals consume two-thirds of all urea in India, led by rice. Poor fertilizer nitrogen-use efficiency (NUE) wastes N (nitrogen)-fertilizers worth ₹1 trillion a year in India and over \$170 billion per year globally. It highlights that Nitrogen use efficiency refers to the yield of a crop relative to the nitrogen (natural and artificial) available to it.

4. The news item further states that N-fertilizers are the main source of nitrous oxide and ammonia pollution of air and nitrate/ammonium pollution of water, affecting health, biodiversity, and climate change. As

per the research, the NUE of the best varieties were five times as much as the least, the investigation found. However, a high NUE doesn't always mean the highest yields and farmers in India generally prefer varieties with the highest yields.

5. The article states that the focus of Indian agriculture has for a long time been to solely increase yield. The article alleges that though this was necessary during the green revolution, it also meant more synthetic fertilizers, more wastage and pollution. It claims that India needs to find newer crops that have improved NUE and yields.

6. The article further explains that India is the world's second-largest source of nitrous oxide (N₂O), a greenhouse gas that heats up the atmosphere far more than carbon dioxide. Nearly 11% of such global manmade emissions in 2020 were from India, topped only by China at 16%. The major source of these emissions is fertilizer usage, according to a global assessment of N₂O emissions.

7. The news item raises substantial issue relating to compliance of the environmental norms, especially compliance of Air (Prevention and Control of Pollution) Act, 1981 and the Environment Protection Act, 1986.

8. Power of the Tribunal to take up the matter *suo-motu* has been recognized by the Hon'ble Supreme Court in the matter of "*Municipal Corporation of Greater Mumbai vs. Ankita Sinha & Ors.*" reported in 2021 SCC Online SC 897.

9. Hence, we implead the following as respondents in the matter:

- (1). Indian Council of Agricultural Research, through its Secretary, Krishi Bhavan, New Delhi 110 001

- (2). Ministry of Agriculture and Farmer Welfare, through its Secretary, Krishi Bhavan, New Delhi 110 001
- (3). Ministry of Environment, Forest and Climate Change, through its Secretary, Indira Paryavaran Bhawan Jorbagh Road, New Delhi – 110 003
- (4). Central Pollution Control Board, through its Member Secretary, Parivesh Bhawan, East Arjun Nagar, Delhi-110032

10. Issue notice to the above respondents for filing their response/reply by way of affidavit before the Tribunal at least one week before the next date of hearing. If any of the respondents directly files the reply without routing it through his advocate then the said respondent will remain virtually present to assist the Tribunal.

11. List on 03.12.2024.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

August 23, 2024
Original Application No.1093/2024
SN