

[www.vishnuias.com](http://www.vishnuias.com)



# Topic wise content



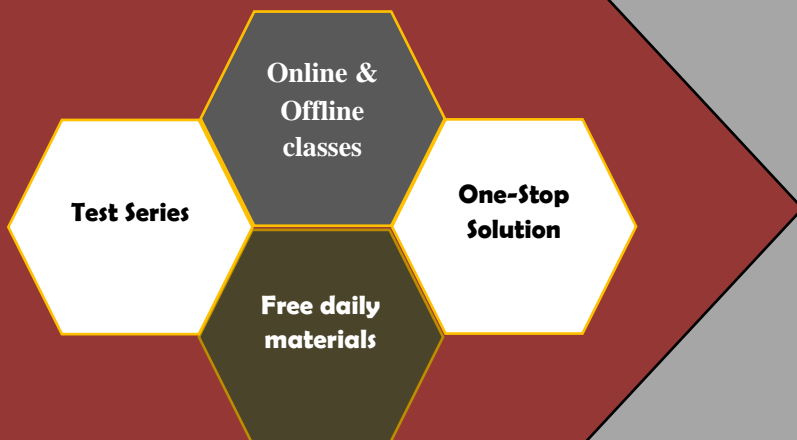
<https://t.me/vishnuiasmentor>



<https://www.youtube.com/channel>

## Nano Urea Liquid: IFFCO

Notes for civil services preparation



UPSC

General Studies

## Nano Urea Liquid: IFFCO

Recently, the **Indian Farmers Fertiliser Cooperative Limited (IFFCO)** introduced the **world's first Nano Urea Liquid** for farmers across the world.

### Indian Farmers Fertiliser Cooperative Limited

- **About:**
  - It is **one of India's biggest cooperative societies** which is **wholly owned by Indian**
  - **Founded in 1967** with just 57 cooperatives, today it is an amalgamation of over 36,000 Indian Cooperatives with **diversified business interests ranging from General Insurance to Rural Telecom** apart from its core business of manufacturing and selling
- **Objective:**
  - To **enable Indian farmers to prosper through timely supply of reliable, high quality agricultural inputs and services** in an environmentally sustainable manner and to undertake other activities to improve their welfare.

### Key Points

- **About:**
  - It is a **nutrient (liquid) to provide nitrogen to plants** as an alternative to the conventional urea.
- It is **developed to replace conventional urea** and it can **curtail the requirement of the same by at least 50%**.
  - It contains 40,000 mg/L of nitrogen in a 500 ml bottle which is **equivalent to the impact of nitrogen nutrient provided by one bag of conventional urea**.
- **Conventional urea is effective 30-40%** in delivering nitrogen to plants, while the effectiveness of the **Nano Urea Liquid is over 80%**.
  - Its **effectiveness** has been tested in over **11,000 farmers' fields for 94 crops like rice and**
  - An average **8% increase in yield** has been witnessed.

### Developed At:

- It has been **indigenously developed at Nano Biotechnology Research Centre, Kalol, Gujrat** in line with **Atmanirbhar Bharat** and **Atmanirbhar**
- India is **dependent on imports** to meet its **urea requirements**.

**Significance:**

- - **Improves Plant Nutrition:**
    - It has been found effective and efficient for plant nutrition which increases the production with improved nutritional quality.
- It will **boost a balanced nutrition program by reducing the excess use of Urea application** in the soil and will make the crops stronger, healthier and protect them from **lodging**
  - **Lodging** is the bending over of the stems near ground level of grain crops, which makes them very difficult to harvest, and can **dramatically reduce yield**.

**Improves Environment:**

- - It will also have a **huge positive impact on the quality of underground water**, a very **significant reduction in global warming** with an **impact on climate change and sustainable development**.

**Increase Farmers' Income:**

- - It is easy on the pocket of farmers and will be effective in **increasing farmers'** It will also significantly **bring down the cost of logistics and warehousing**.