

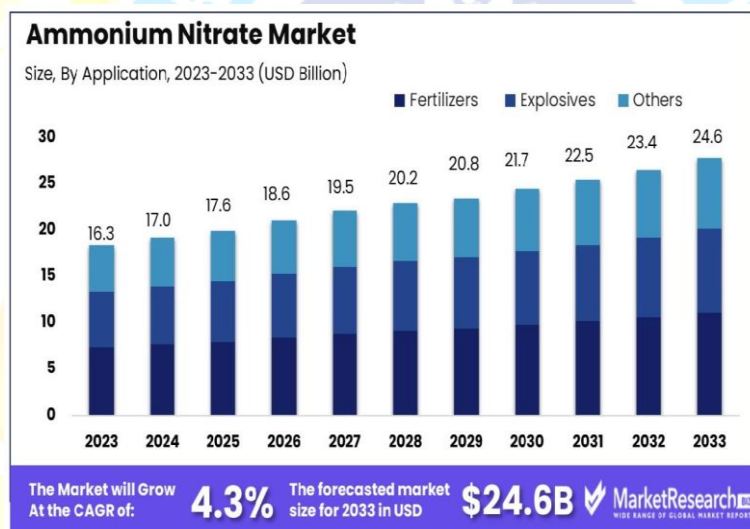


AMMONIUM NITRATE IMPORTS - ECONOMY

News: The sharp rise in the import of ammonium nitrate (AN) from Russia has raised concerns for India's domestic fertilizer industry.

What's in the news?

- **Domestic fertilizer firms are facing stiff competition from cheaper imports.**
- India's installed AN capacity is 10.96 lakh tonnes per annum.
- Additional 10.19 lakh tonnes per annum are being added by major fertilizer companies like Rashtriya Chemicals and Fertilizers, Gujarat National Fertilizer, and National Fertilizer.
- The import of 2.39 lakh tonnes of AN in the last fiscal year, compared to 91,236 tonnes in FY22, has led to a **significant reduction in domestic capacity utilization from 91% to 72%.**
- This has affected the profitability and operations of domestic producers.



- **One of the primary reasons for the surge in imports is the price difference.**
- Imported AN from countries like Russia benefits from access to subsidized natural gas, a key raw material for AN production.
- The mining sector, which relies heavily on AN for conducting controlled blasts during ore extraction is also concerned about the rising import dependence.
- **To reduce import dependence, major initiatives are underway.**
- For example, Coal India signed a joint venture with BHEL earlier this year to establish an AN production facility in Odisha.



Aspect	Details
Chemical Composition	Ammonium Nitrate (NH_4NO_3) is the nitrate salt of the ammonium ion , consisting of ammonia and nitric acid. It is a white crystalline solid highly soluble in water .
Production	Manufactured through the neutralization of nitric acid (HNO_3) with ammonia (NH_3). Common methods include the Stengel process and the NSM/Norsk Hydro process.
Uses	Fertilizer: High nitrogen content makes it widely used in agriculture. Explosives: Combined with fuel oil to create ANFO, used in mining and demolition. Cold Packs: Used in instant cold packs for injury treatment.
Safety Issues	Ammonium nitrate can decompose at high temperatures, causing fires or explosions. It is an oxidizer, which can enhance combustion when exposed to fuels.
Historical Incidents	Involved in major disasters, including the Oklahoma City bombing (1995) and the Beirut explosion (2020).
Storage and Regulations	Must be stored in well-ventilated, cool, dry places away from fuels. Many countries regulate its sale to prevent misuse in explosives.
Environmental Impact	Can lead to soil acidification and water contamination if overused as a fertilizer.
Alternatives	Alternatives like urea or a fusion of ammonium nitrate with ammonium sulfate are being developed.

INDIAN FERTILISER INDUSTRY

- One of eight core industries.
- The second biggest subsidy after food.
- The Indian fertilizer industry is expected to reach Rs. 1.38 lakh crore by 2032, with a CAGR of 4.2% from 2024 to 2032, according to IMARC Group.
- In 2023, the market size was Rs. 94,210 crore.
- India is the second largest consumer of urea after China and second largest producer of Nitrogenous Fertiliser.
- This was driven by increased agricultural demands and strategic governmental interventions.
- FY24 saw fertilizer production at 45.2 million tonnes.
- India is the world's second-largest producer of fruits and vegetables.



PL RAJ IAS & IPS ACADEMY

MAKING YOU SERVE THE NATION

- The geopolitical landscape and domestic production focus, particularly on nano-liquid urea, have influenced India's fertilizer market.
- Urea imports declined by 7%, DAP by 22%, and NPKs by 21% in FY24.
- Climate change challenges, addressed by the National Mission for Sustainable Agriculture (NMSA) and initiatives like PKVY, promote organic farming and continuous innovation in fertilizers.

Source: https://epaper.thehindu.com/ccidist-ws/th/th_international/issues/99885/OPS/GVLDADPQP.1+G8QDBFRBE.1.html



**P.L. RAJ IAS & IPS ACADEMY | 1447/C, 3rd floor, 15th Main Road,
Anna Nagar West, Chennai-40. Ph.No.044-42323192, 9445032221
Email: plrajmemorial@gmail.com Website: www.plrajiasacademy.com
Telegram link: https://t.me/plrajias2006 YouTube: P L RAJ IAS & IPS ACADEMY**