

126TH BIRTH ANNIVERSARY OF KAZI NAZRUL ISLAM

# The rebel poet who foretold planetary crisis



Priyam Paul is a journalist and translator.

PRIAM PAUL

Born in 1899, national poet Kazi Nazrul Islam, also known as the rebel poet, brought a bold new voice to Bangla literature and national life. His poetry fiercely challenged injustice and inspired youth towards positive change. Early in his career, Nazrul addressed themes of human-caused planetary crisis, making him a pioneer in environmental reflection in the Bangla language. As a visionary, he foresaw both life's vitality and the world's potential destruction.

After military service, Nazrul returned to Kolkata, writing poetry and stories, and joined a circle of progressive writers and activists. His friendship with Muzaffar Ahmad marked a key turning point in his life and work. They launched the evening daily *Nabajug* on July 12, 1920, with support from political leader AK Fazlul Huq, as a form of both resistance to colonial rule and political activism.

*Nabajug* was crucial to Nazrul's early career, providing him with a platform to write on politics and literature. Printed on a single sheet and sold for one paisa, it quickly gained a wide readership despite the founders' limited journalistic experience. Nazrul's talent for succinctly summarising complex news impressed his colleagues and contributed to the paper's success. It was in *Nabajug* that Nazrul published *Roz Kiyamat* (translated as *Doomsday* by Arka Dev), an article symbolising the planetary crisis.

What truly set *Nabajug* apart, however, were Nazrul's innovative headlines. Drawing from his deep familiarity with Bangla literary traditions, he infused his headlines with references from the poetry of Chandidas and Vidyapati, and even quoted Rabindranath Tagore. In one notable instance, he borrowed and modified two verses of a Tagore song to title a report on Faisal, the emperor of Iraq.

Beyond his reporting on Iraq, Nazrul and his associates developed a distinctly internationalist outlook. Their writings



VISUAL: ALIZA RAHMAN

reflected a deep interest in anti-colonial struggles worldwide and strong solidarity with the growing labour and communist movements.

In his article *Roz Kiyamat*, Nazrul cited several esteemed scientists who had claimed that the day of the Earth's destruction was not as far off as many had long supposed. Drawing from their findings, he noted that over the

past 50 years, the number of icebergs in the southern polar region had steadily increased. Captain Smitharth of Edmonton was the first to discover a 580-foot-high iceberg, followed by Captain Scott, who observed an ice shelf towering over 600 feet.

He wrote that a sailor from Egeneta had seen a mountain-like iceberg over a thousand feet high—a sight that shocked the entire world. It was later confirmed that this ice mountain

was wise in his thinking. By translating the findings of Professor Louis and other renowned scientists for the Bangalee audience, he warned that the second great flood—or the great extinction—was imminent on Earth. While the entire planet might not be destroyed, it was beyond doubt that a significant part of it would be devastated.

In his article, he wrote of an immense expanse of sky-reaching ice shelves in the

Himalayas, destined to wash away everything in their path. One might think this came from a modern scientific or journalistic report, yet it was written in 1920 and published in the book *Jugabani* in 1922. The book was immediately banned.

He observed that humanity was increasingly dependent on coal mining and its widespread use for energy. "Do you know which era this coal dates back to?" he asked. "It comes from the carbonic acid-saturated ages, many hundreds of thousands of years ago, formed from the trees of that era. Even today, forest vegetation remains adept at absorbing carbonic acid. Yet every bit of coal, every matchstick burned, consumes the very oxygen essential to human survival." He cited a renowned English scientist who had recently warned that atmospheric oxygen was steadily decreasing, leading to pollution and a gradual return to the carbonic acid-filled conditions of prehistoric times.

Nazrul was acutely aware of the environmental hazards posed by coal. He warned that even if humanity stopped its reckless exploitation of this destructive fuel—noting that, even at the time he was writing, burning coal consumed over 1,600 million tons of oxygen annually—and turned to electricity as an alternative, new dangers would inevitably emerge. "Whichever path we choose, death awaits—crocodiles in the water, tigers on land!" he wrote, voicing his scepticism about electricity as a truly safer substitute. His words reflect a remarkably early awareness of the environmental trade-offs of industrial progress, articulated in the Bangla language over a century ago with striking foresight.

Globally, discussions of climate change began to surface in the 1960s, initially gaining traction in the Western world before spreading more broadly. In this context, Kazi Nazrul Islam stands out as a pioneer in alerting Bangalee readers to planetary crises long before the concept was widely recognised. Through his journalistic writings—often adopting a pessimistic tone that contrasts with his usual celebration of youth and life—Nazrul depicted the harsh realities of environmental degradation. Though writing nearly a century ago, his work captured the destructive nature of climate change, offering a prophetic glimpse into the global crisis that would unfold in the decades to come.

# Research into nano-urea can transform our agricultural sector



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In 1913, the German scientist Fritz Haber successfully synthesised ammonia from atmospheric nitrogen—a breakthrough that laid the foundation for modern chemical fertilisers. Since then, scientists have continually developed new technologies to meet the growing food demands. The most recent and notable addition to this progress is nano-urea, hailed as a groundbreaking advancement in the agricultural sector.

Bangladesh, with its predominantly agrarian economy, relies heavily on fertilisers to meet food demands. To cope with the growing population, climate change, and environmental challenges, scientifically sound and sustainable technologies must be adopted in agriculture. Experts believe that the integration of nanotechnology in agriculture will play a transformative role in ensuring food security and promoting sustainable development.

Amidst global urea shortages, the demand for and necessity of nano-urea is immense. The Bangladesh Chemical Industries Corporation (BCIC) oversees several fertiliser plants, with a combined annual urea production capacity of approximately 2.3 million metric tonnes as of FY 2024–25. In the FY 2023–24, Bangladesh Chemical Industries Corporation (BCIC) produced about 527,271 metric tonnes of urea, necessitating the import of 1.66 million metric tonnes to meet the total demand. Despite efforts to boost domestic production, Bangladesh still relies heavily on imports. In this context, nano-urea offers a promising solution to tackle present and future

challenges in fertiliser supply and sustainability.

The use of fertilisers dates back to ancient times, with early civilisations like the Egyptians, Babylonians, and Romans applying natural substances to enrich soil. Scientific approaches emerged in the 18th century with crop rotation and gypsum use. In the 19th century, Justus von Liebig popularised the Law of the Minimum which states that a single and essential resource restricts plant growth even if other resources are abundant, while John Bennet Lawes founded first chemical fertiliser factory. The 20th century brought major advances, including the Haber-Bosch process in 1913, which enabled industrial-scale ammonia production and transformed global agronomy. This legacy of innovation continues today with the advent of nano-urea—a promising frontier in sustainable agriculture.

Urea is an essential nutrient for plant growth. Like food for humans, fertilisers nourish plants. For healthy and balanced growth, plants require a specific set of nutrients, without which their development is impaired. The three primary macronutrients in fertilisers are nitrogen (N), phosphorus (P), and potassium (K). Urea, chemically known as carbamide contains about 46 percent nitrogen, a key component of proteins crucial for vegetative growth. It is highly water-soluble and stable, enhancing the growth of leaves, stems, and overall productivity of the plant.

However, a major drawback of conventional fertilisers is the loss of nutrients after soil application, due to factors like rainwater runoff

and evaporation. As a result, plants are often deprived of their required nourishment.

In contrast to conventional urea, the nanotechnology-based fertiliser uses ultrafine particles (20–50 nanometres) and requires up to 80 percent less volume with equal or better yields. A single 500 ml bottle of nano-urea can replace a 45 kg bag of traditional urea. Applied as a foliar spray, nano-urea is directly absorbed by plant leaves, minimising nutrient loss. It delivers nitrogen gradually, ensuring sustained nutrition and reduced environmental harm. As a result, nano-urea is eco-friendly, efficient in smaller quantities, and economically viable—emerging as a promising tool for the future of sustainable agriculture.

Currently, India is leading the production and marketing of nano-urea. Indian Farmers Fertiliser Cooperative Limited (IFFCO) launched the world's first nano-urea in June 2021, marking a breakthrough in sustainable agriculture. IFFCO now has the capacity to produce approximately 200,000 bottles daily. By the end of 2024, the company aims to scale up annual production to three billion bottles, equivalent to 13.5 million tonnes of conventional urea. Nano-urea is already being exported to more than 25 countries, including the United States, Brazil, Mexico, Sri Lanka, and Kenya.


Bangladesh has also begun research on nano-urea as part of agricultural extension efforts. In a recent article, Dr Md Roushon Jamal highlighted the growing importance of nano-urea in the country. Although the use of nanotechnology for urea production is still in its early stages in Bangladesh, institutions like Bangladesh University of Engineering and Technology (BUET), Bangladesh Agricultural University (BAU), and Gazipur Agricultural University (GAU) have initiated exploratory research in this field. Notably, Prof Dr Md Javed Hossain Khan, a professor of the Department of Chemical

Engineering at Jashore University of Science and Technology (JUST), has made a significant breakthrough by successfully developing a locally produced nano-urea fertiliser. According to his findings, cultivating one bigha of land would require only Tk 230 worth of nano-urea—a stark contrast to the current cost of around Tk 4,200, suggesting a potential cost reduction of approximately 82 percent. However, extensive research

is still needed to fully understand the effects of nano-urea due to its unique composition and nanoscale properties.

From early dependence on organic fertilisers to the chemical revolution introduced by conventional urea, agriculture is now entering a new era with the advent of advanced nano-urea. To build a resilient agricultural future, Bangladesh must adopt a holistic strategy that promotes

research and development, enhances logistics and infrastructure, supports farmer training programmes, ensures the production of nano-urea that meets global standards, and encourages its field-level application. With these measures in place, Bangladesh holds the potential to build a green, sustainable, agriculture-based economy. And nano-urea could be a key driving force in realising that vision.



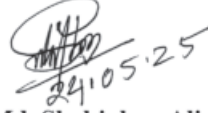
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Memo No. TANG/POU/PROQU/2025/0702, Dated: 24/05/2025

**e-Tender Notice No. 05/2024-2025 (OTM)**  
**Tangail Pourashava Infrastructure Improvement Project (TPIIP)**  
e-Tender is invited in the National e-GP System Portal (<http://www.eprocure.gov.bd>) for the procurement of the below Schemes/packages:

Tender ID No.	Schemes/packages name	Tender document last selling date & time	Tender closing date & time
1104894	<b>Package No: TPIIP/2023-24/BT-40</b> , Development of Bus Terminal in Proposed Rabna Bypass area under Tangail Pourashava.	23-Jun-2025 17:00	24-Jun-2025 13:00
1113987	<b>Package No: TPIIP/2024-25/OT-46</b> , Part1: Renovation of DC Lake in Tangail District Head Quarter Installation of Street lights & Construction of Walkways. Part-2: Renovation of DC Lake in Tangail District Head Quarter Installation of Street lights & Construction of Walkways. Part-3: Renovation of DC Lake in Tangail District Head Quarter Installation of Street lights & Construction of Walkways.	23-Jun-2025 17:00	24-Jun-2025 13:00

These are an online tender, where only e-Tender will be accepted in the National e-GP Portal and no offline/hard copies will be accepted. To submit e-Tender registration in the National e-GP System Portal (<http://www.eprocure.gov.bd>) is required. The fees for downloading the e-Tender documents from the National e-GP System Portal have to be deposited online through any registered banks branches up to mention above. Further information and guidelines are available in the National e-GP System Portal and from help desk ([helpdesk@eprocure.gov.bd](mailto:helpdesk@eprocure.gov.bd)). If the tender submitted by the contractor is more than 10% above or more than 10% less than the official estimate, it will be treated as outright rejection.



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GD-1260