

Alisher Mirzabaev,
Shyam Basnet, and
Valerien Pede

IRRI Global Rice Market Brief Series - Issue#10 - April 2026

# The Fertilizer Squeeze:
# Managing cost pressures in the current rice cropping season

IRRI International Rice Research Institute

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# The Fertilizer Squeeze: Managing cost pressures in the current rice cropping season

## Highlights

- **The fertilizer prices are going up, driving up production costs for farmers.** Fertilizer prices are up 26.2 percent month on month in March, led by urea at 53.7 percent. Urea prices averaged USD 725.6/mt in March, compared with USD 658.3/mt for Diammonium Phosphate (DAP) and USD 380.6/mt for potassium chloride (KCI)[1].
- **Prices in international rice markets remain relatively low.** The Middle East conflict dampened trade activity while fuel, insurance, harvesting, milling, packaging, and internal transport costs are increasing[2].
- **There is sufficient availability of nitrogen fertilizers for April-May period, but access to them is costly and uneven.** There is a need to ensure fertilizer availability and affordability after April-May period.
- **Higher production costs and low rice prices are shrinking farm margins and leading to the risk of working-capital stress** across the fertilizer value chains.

**The key question being asked across the global rice sector is not only if fertilizer availability can be assured, but also if fertilizer access will be affordable and timely enough for making rice growing economically viable for farmers.** In this context, the key to ongoing development is the continued rise in fertilizer prices, both internationally and domestically.

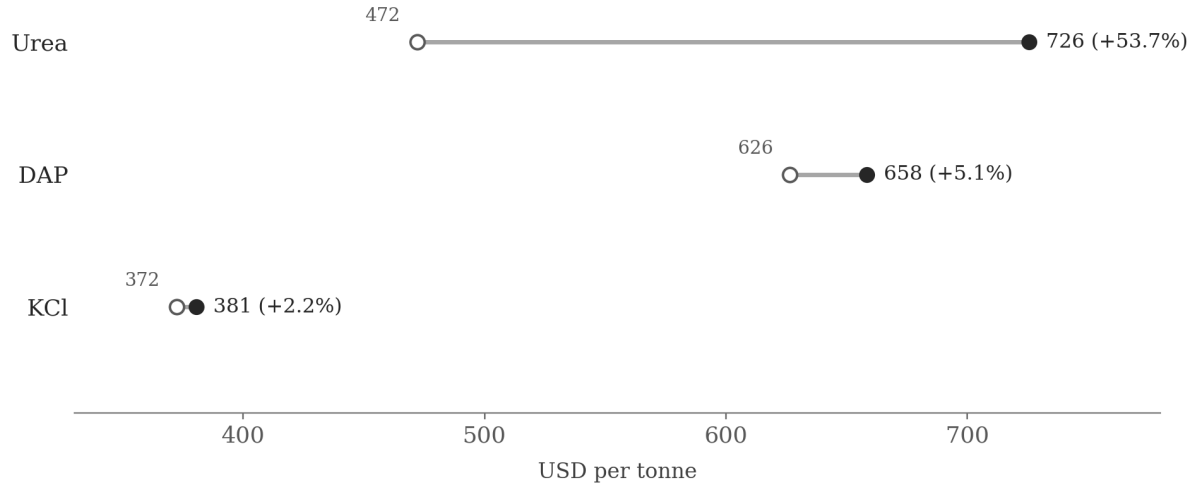



*Figure 1. Monthly benchmark price movements in March 2026. Open circles show February values and filled circles show March values. Source: World Bank Pink Sheet, April 2026.*

**Urea has become the clearest pressure point, rising from USD 472.0/mt in February to USD 725.6/mt in March.** DAP also rose, but much less sharply, from USD 626.5/mt to USD 658.3/mt, while potassium chloride moved from USD 372.5/mt to USD 380.6/mt. For rice, this matters because nitrogen is the core top-dressing input;

however, phosphates (DAP), potash (KCI), sulfur prices, freight and insurance costs still determine whether farmers can maintain a balanced nutrient package[1].

**The fertilizer price pass-through is already visible at farm-gate level**. In the Philippines, urea prices rising sharply in April despite availability of supply for the next planting season[3]. Cambodia, Thailand, and Viet Nam also face higher fertilizer prices. The near-term problem is therefore not only physical supply; it is the cash, credit, and dealer confidence needed to move fertilizer now when farmers are deciding whether to sustain or trim application rates for the ongoing planting season.

**Each rice economy has a different fertilizer fingerprint**. The same external shock lands very differently across rice economies because domestic production bases differ sharply across nitrogen, phosphates, and potash. China and Indonesia are relatively well buffered in nitrogen. India is materially safer in nitrogen than in phosphates or potash. Viet Nam is more resilient on nitrogen than often assumed. Bangladesh, the Philippines, Cambodia, and Tanzania remain structurally more exposed to imports. The vulnerability is not "fertilizer" in general; it is the nutrient that is both agronomically indispensable and hardest to replace quickly in each system.

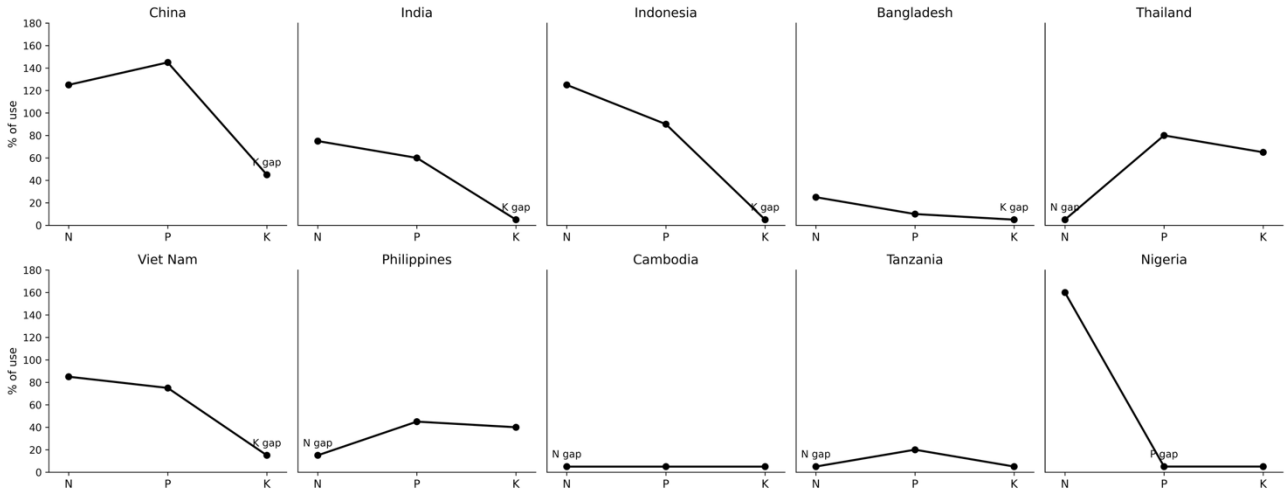



*Figure 2. Local Production Share of Domestic Agricultural Use, average for 2018-2023. Source: FAO. Note: Structural exposure differs sharply across nitrogen, phosphates, and potash.*

**Potash remains the long-run Achilles heel in several otherwise buffered systems.** Nitrogen dominates the immediate shock, but potash and phosphates can still widen whole-farm fertilizer inflation if procurement lags or financing tightens. This is why governments should avoid treating urea availability as the only measure of fertilizer security.

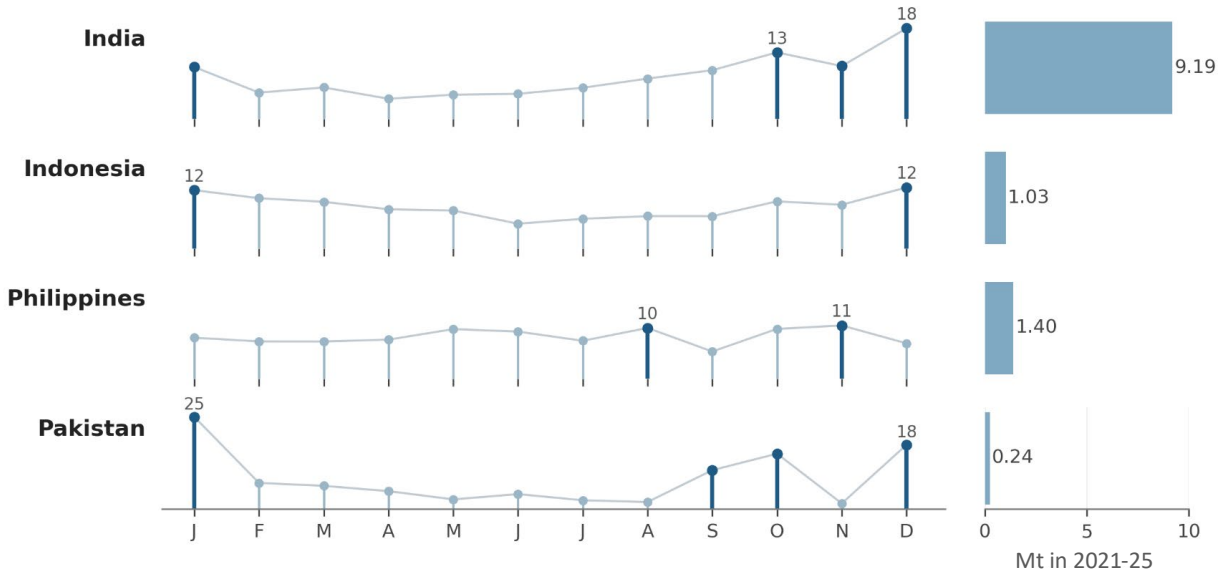



*Figure 3. Monthly shares of fertilizer imports. Source: UN Comtrade 2025. Note: Darker marks indicate months above 10% of annual arrivals.*

**Import rhythm matters almost as much as annual tonnage.** Annual import totals can look manageable even when import timing is concentrated. For example, India's top three 2025 nitrogen-import months accounted for 41 percent of annual arrivals, compared with 34 percent in Indonesia, 30 percent in the Philippines, and 58 percent in Pakistan. A shipping shock does not need to last a whole season to be damaging. It only needs to collide with the short interval when importers and dealers normally rebuild inventories. **This is why the May-July window remains the operational risk point for main-season rice systems**[4].

**Country snapshots for the next cropping season**

| Country | Current position and response | Likely rice market implications |
|---|---|---|
| India | Strong administrative capacity and stocks help, but the price signal has worsened. A mid-April IPL tender for 2.5 Mt of urea reportedly drew bids around USD 1,000/mt, nearly double the prior tender. The Cabinet also approved Rs. 41,533.81 crore for P&K fertilizer subsidy for Kharif 2026[5,6]. | Availability looks manageable, but the fiscal and working-capital burden has risen. |
| China | Reserve releases and export restraint protect the domestic market; earlier reporting showed tight controls on urea, nitrogen-potassium blends, and some phosphate products. | Low immediate domestic shortage risk; spillover implications for importers in Asia and Africa. |
| Bangladesh | Gas scarcity shut most urea plants in March. By mid-April, Bangladesh planned 11 LNG cargoes for May, most from the spot market, and raised fuel prices by 10 to 15 percent.[10] | Access is a key constraint. |
| Thailand | Green Flag Plus[10], price monitoring, and stock checks are helping, but Thailand remains heavily exposed to imported nitrogen and fertilizer-heavy paddy production costs. | Supply may hold, yet margins are highly eroded if fertilizer prices remain elevated, leading to lower application rates, affecting yields. |

| | | |
|---|---|---|
| Viet Nam | Viet Nam is more resilient on urea availability because of domestic production capacity, but domestic fertilizer prices still rose by 10–15 percent in March, and DAP, sulfur, potash, freight, and dealer finance remain pressure points[9]. | More resilient on urea, but potash, sulfur, DAP, freight, and dealer finance can still raise total nutrient costs. |
| Philippines | Enough supply for April-May period, with short-to-long-term interventions at play through planned investments into domestic fertilizer production[8]. Domestic urea prices rose sharply by early April. Remains import dependent on major nutrients. | Affordability and dealer replenishment are the main risks. |
| Indonesia | Indonesia is the strongest regional nitrogen buffer because of domestic urea capacity and local gas. | Indonesia is comparatively protected on urea. |
| African countries | In Africa, fertilizer access is now a key food-security risk, especially where currency availability, freight, and inland logistics are constrained. | African importers may face access problems through finance and logistics. |

**What this means over the next few months**

Available information points to sufficient physical availability of fertilizers in April-May period in major rice growing economies. However, import-dependent countries may start facing growing fertilizer availability issues if the situation does not normalize beyond May. Moreover, farmers are already confronting tighter access, slower delivery, and higher fertilizer prices even when fertilizers are available. The farm-level pain is greatest where imported nitrogen exposure overlaps with a fertilizer-heavy production cost structure.

**Managing fertilizer cost pressures in the current rice cropping season.** Access to fertilizers by rice growers will be uneven and expensive, and addressing this requires immediate policy actions. If the Middle East conflict ends soon, and oil and fertilizer trade normalize, the shock may remain mainly a price and margin problem. If the ceasefire breaks down or vessel owners and insurers continue to avoid the corridor into May-June period and beyond, import-dependent systems will face delayed deliveries, thinner dealer inventories, and lower fertilizer application rates. Near term policies should focus not only on urea tonnage but also phosphates, potash, sulfur for nutrient balance, as well as working capital across the fertilizer value chain.

**Policy implications for the next three months**

- **For countries with relatively large fertilizer buffer capacity** such as India, China, and Indonesia: Regular monitoring of fertilizer availability and access by farmers through the planting window, ring-fencing domestic nitrogen output by prioritizing energy delivery to fertilizer production facilities, and prioritizing fertilizer shipments in rail and port logistics will be essential. Efforts need to be made to protect availability and access to DAP, KCI, NPKS, and sulfur-linked fertilizer products, not only urea.
- **For import-dependent Asian and African countries**: there is a need to secure May-July fertilizer cover through framework contracts, government-to-government options, and pre-positioned stocks near rice belts. Expanding working-capital or guarantee lines for importers, dealers, and organized farmer groups can help with fertilizer access even when international prices remain high.
- **For gas- and foreign-exchange-constrained importers** such as Bangladesh and most of the major rice growing African economies: there is a need to prioritize Liquefied Natural Gas (LNG) allocation to fertilizer plants during the planting window, pair import tenders with fast-track foreign-exchange access and port clearance, and use small, time-bound vouchers or input-credit lines for farmers and inland dealers rather than blanket price caps that discourage replenishment.

- **Across all groups**: protecting fertilizer trade channels as diligently as grain trade channels; intensifying split nitrogen application, precise nutrient management, and site-specific nutrient advice; and monitoring quality, adulteration, and hoarding. Tight markets raise the risk of price gouging precisely when farmers can least absorb this.

Sources: [1]World Bank, Commodity Price Data (Pink Sheet), April 2026; and "Energy prices surged in March; non-energy edged up – Pink Sheet," 3 April 2026; [2]FAO, Rice Price Update, April 2026 (March 2026 market data)., [3]Philippine Information Agency, 25 March 2026; Department of Agriculture Philippines, 1 April 2026; Business Mirror, "Urea prices soar as war strains supply chains," 13 April 2026. [4]UN Comtrade; [5] Reuters, "India urea prices double to $1,000 in tender on Iran war shock," 15 April 2026; [6]Press Information Bureau of India, "Cabinet approves Nutrient Based Subsidy rates for Kharif Season 2026," 8 April 2026; [7]Reuters, Bangladesh LNG and fuel-price updates, 16 and 19 April 2026; Reuters / MarketScreener, "Bangladesh shuts fertiliser factories as Middle East crisis strains gas supply," 5 March 2026. [8]The Philippine News Agency, 21 April 2026.[9]Saigon News, April 1, 2026; [10]Reuters, April 19, 2026;[11]Pattaya Mail, March 20, 2026.

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**About the Authors:**

**Alisher Mirzabaev** is a Senior Scientist in Policy Analysis and Climate Change at the International Rice Research Institute (IRRI). His research spans rice agri-food systems, rice markets, economics of land degradation and climate change with over 100 scientific publications.

**Shyam Basnet** is an Agricultural Economist in the TPI Unit at IRRI, specializing in economic modeling and trade analysis. His research focuses on agri-food system assessment, economic model development, and policy impact evaluation.

**Valerien Pede** is a Senior Agricultural Economist at IRRI and currently serves as Head of the Transformative Policies & Investments (TPI) Unit. His research covers spatial econometrics and regional analysis, impact evaluation of agricultural technologies, foresight and policy analysis, commodity price dynamics, and the intersections of climate change, food security, and poverty.