Daily News Juice

1. How can Indian farmers be weaned away from urea, DAP and potash?

Introduction



Capping or even reducing the consumption of urea, di-ammonium phosphate (DAP) and muriate of potash (MOP) has become a strategic imperative for India.

Lead to Imports

All these fertilisers are imported, whether directly or as inputs for domestic manufacturing.

MOP is wholly imported from countries such as Canada, Russia, Jordan, Israel, Turkmenistan and Belarus, as India has no mineable potash reserves.

In urea, India's production meets over 85% of

its consumption demand, but the plants mostly run on liquefied natural gas imported from Qatar, US, UAE or Angola.

DAP is imported in the form of finished fertiliser (mainly from Saudi Arabia, China, Morocco, Russia and Jordan) as well as raw material (rock phosphate from Jordan, Morocco, Togo, Egypt and Algeria; sulphur from UAE, Qatar and Oman) and intermediate chemicals (phosphoric acid from Jordan, Morocco, Senegal and Tunisia; ammonia from Saudi Arabia, Qatar, Oman and Indonesia).

Import dependence is made worse by the rupee's depreciation.

High percentage of individual nutrients

The second reason for limiting urea, DAP and MOP usage is that they are high-analysis fertilisers: Urea and MOP contain 46% nitrogen (N) and 60% potash (P) respectively. DAP has 46% phosphorous (P) plus 18% N.

Most crops don't require fertilises with such high percentage of individual nutrients. They need balanced fertilisation – products with nutrients in the right quantities and ratios for effective absorption through the plant roots and leaves.

These include not only N, P and K, but also secondary nutrients (sulphur, calcium and magnesium) and micronutrients (zinc, iron, copper, boron, manganese and molybdenum). Weaning away farmers from high-analysis fertilisers also translates into more efficient use of imported material and scarce foreign exchange.

An effective DAP replacement

A good example is 20:20:0:13 or ammonium phosphate sulphate (APS). A complex fertiliser with 20% N, 20% P, 0% K and 13% sulphur (S), it has emerged as an effective substitute for DAP, despite having less than half of the latter's P content.

DAP is manufactured by importing merchant-grade phosphoric acid with 52-54% P content and reacting it with ammonia (the source of N). The end-product has 18% N and 46% P.

But companies can, instead, import rock phosphate with 28-36% P and react it with sulphuric acid. The resultant "weak" phosphoric acid, with only 27-29% P, is further reacted with ammonia and sulphuric acid to produce 20:20:0:13.

The idea is not to waste expensive phosphoric acid. Making one tonne of DAP requires about 460 kg of phosphoric acid and 220 kg of ammonia. Here, you use only 220-230 kg of phosphoric acid, 220 kg of ammonia and 1,200 kg of sulphuric acid to get one tonne of 20:20:0:13.

Substitution drivers

APS are good enough for oilseeds, pulses, maize, cotton, onion, chilly and all such "sulphur-hungry" crops. Even the P and K nutrient requirement of potato can be effectively met through 10:26:26:0 or 12:32:16:0 complex fertilisers: DAP should be resrved only for wheat, rice and sugarcane".

APS has become India's third largest-consumed fertiliser after urea and DAP. It has overtaken single super phosphate (SSP), previously the most popular alternative to DAP. SSP, which contains 16% P and 11% S, is manufactured by reacting rock phosphate directly with sulphuric acid.

The road ahead

This fiscal (2024-25) should see sales of NPKS complex fertilisers touch 14 mt, almost double the 7.3 mt of 2013-14. Much of it is courtesy of 20:20:0:13, which is steadily replacing DAP.

A similar marketing push is necessary for 10:26:26:0, 12:32:16:0, 15:15:15:0 and 14:35:14:0, so as to minimise direct application of MOP and selling only after incorporating into these complexes.

The ultimate goal must be to cap, if not reduce, consumption of all high-analysis fertilisers.

Relevance: GS Prelims; Economics

Source: Indian Express

2. Shaktikanta Das appointed new Principal Secretary

Introduction

Former Reserve Bank of India (RBI) Governor Shaktikanta Das was appointed the Principal Secretary to the Prime Minister recently. The retired IAS officer is perhaps the only bureaucrat

in history who would be holding the post with experience working in both monetary policy (controlled by the central bank) and fiscal policy (laid out by the government).

Das holds another distinction: he is only the second RBI Governor to have a six-year tenure, apart from Bimal Jalan (1997-2003).

Former RBI governor Shaktikanta Das appointed as 'Principal Secretary-2' to Prime Minister Narendra Modi



Who is Shaktikanta Das?

Das joined the Indian Administrative Service in 1980 as an officer of the Tamil Nadu cadre. A history graduate from St. Stephen's College from the University of Delhi, he was the Fertilisers Secretary in 2014.

Soon after, he was made Revenue Secretary in the Ministry of Finance under the BJP-led NDA government which had just then come to power. He was named the Economic Affairs Secretary in August 2015 and remained so till his retirement in May 2017. Das was also a member of the 15th Finance Commission.

RBI Governor from 2018 to December 2024

He served as the RBI Governor from 2018 to December 2024. An official release upon his appointment stated: "During his long tenure in the Ministry of Finance, Government of India, he was directly associated with the preparation of as many as 8 Union Budgets. Shri Das has also served as India's Alternate Governor in the World Bank, Asian Development Bank (ADB), New Development Bank (NDB) and Asian Infrastructure Investment Bank (AIIB). He has represented India in international fora like the IMF, G20, BRICS, SAARC, etc."

Further, he oversaw the withdrawal of Rs 2,000 notes from circulation. Das also focused on making Unified Payments Interface (UPI) and RuPay, the card payments network of the country, global. However, prolonged high food inflation remained a major challenge in the last six years.

What is the Principal Secretary's post?

The Principal Secretary is the administrative head of the Prime Minister's Office (PMO) and is considered the most important aide to the PM. Currently, Pramod Kumar Mishra, a retired IAS officer of the 1972 batch, is the Principal Secretary. Das will be Principal Secretary-2.

In general, the PMO also includes the National Security Advisor, Advisor to PM, Additional Secretaries, Joint Secretaries and other senior bureaucrats. The Principal Secretary is tasked with preparing notes on matters to be discussed between the PM and foreign dignitaries, ensuring coordination among various ministries and departments, sharing important orders before the PM, and so on.

Relevance: GS Prelims; Governance

Source: The Hindu

3. Champions Trophy is being held after a gap of 8 years

Introduction

The Champions Trophy went dormant for eight years, to return only this year with Pakistan as the host (Matches of India are being hosted at Dubai).

Why was the Champions Trophy discontinued for eight years, and why has it come back?

History



The Champions Trophy was earlier known as the ICC Knockout, when it was staged in Dhaka in its 1998 debut. The next edition was in 2000 in Kenya.

The event was renamed the ICC Champions Trophy in 2002 and was held every two years until 2009. Subsequently the event moved to a four-year cycle and features the top eight teams in the ICC one-day rankings.

The last edition took place in 2017.

Fluctuating fortunes

The goals of the event had been to take cricket to new countries — which explains the first two editions in Bangladesh and Kenya.

However, the Kenya event proved that fans would shell out money for tickets only in the few countries where cricket was already popular.

Then in 2008, the Indian Premier League (IPL) exploded onto the cricketing world, and the Champions Trophy went from being a two-year to a four-year event, until it was stopped entirely after 2017.

Why ICC Men's Champions Trophy is back

Experts believe that there are two main reasons for bringing back the Champions Trophy—the need for a big-ticket event in years that don't have the T20 or the ODI World Cup, and India's refusal to play Pakistan in non-ICC events.

Champions Trophy tournaments are scheduled for 2025 and 2029. The next year, 2026, has the T20 World Cup, which is held every two years, while the ODI World Cup is in 2027, four years after the 2023 edition.

India and Pakistan matches remain the most eagerly watched cricket clashes, and because India does not play Pakistan in bilaterals anymore, ICC tournaments are the only opportunity for fans to watch this high-intensity spectacle.

What is the prize money this time?

The total prize pool has been increased by 53 per cent from the 2017 edition. The prize pool is whopping Rs 59.9 crore (\$6.9 million).

The winner of the eight-team tournament will receive Rs 19.50 crore (\$2.24 million). The runner-up will receive Rs 9.72 crore (\$1.12 million), while the losing semi-finalist will get Rs 4.86 crore (\$560,000) each. All eight teams are assured of \$125,000 (Rs 1.08 crores) each for competing in the ICC Men's Champions Trophy 2025.

Relevance: GS Prelims Source: Indian Express

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