

# Newspaper Analysis

(18.06.2024)



**IMPACT DERAILS 3 COACHES; VAISHNAW, MAMATA VISIT SITE**

# 9 killed, over 40 injured as goods train rams Kanchanjunga Express in Bengal

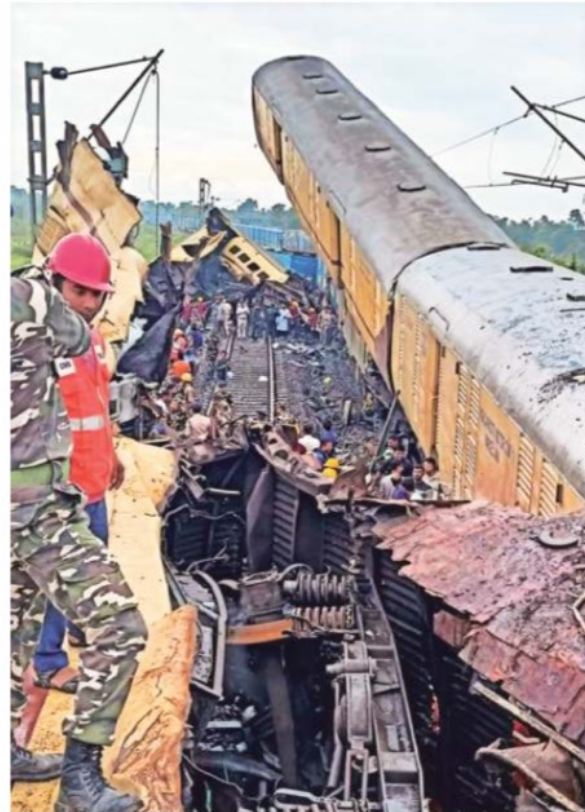
Loco pilot of goods train among dead; Minister says probe underway to detect lapses

**SWEETY KUMARI**  
NEW JALPAIGURI, JUNE 17

NINE PERSONS were killed and at least 40 injured after the Sealdah-bound Kanchanjunga Express from Agartala was hit by a goods train from the rear in West Bengal's Darjeeling district, 11 km from New Jalpaiguri station. The incident took place at 8.55 am Monday. The dead include seven passengers, the loco pilot of the Amingaon (Assam)-Jharsuguda (Odisha) goods train, and another Railways staffer.

Such was the impact of the collision that three coaches at the rear of Kanchanjunga Express derailed between Rangapani and Chhatarhat stations, under the Northeast Frontier Railway zone. Rescue efforts began swiftly but it took a while to get the trapped passengers out because of the

**CONTINUED ON PAGE 2**



Rescue work underway at the site of the collision between the Kanchanjunga Express and a goods train near Rangapani railway station in West Bengal on Monday. PTI

Human error, disregard for signal by loco pilot of goods train: Initial probe

**SOUMYARENDRA BARIK, RAVIK BHATTACHARYA & ATRI MITRA**  
NEW DELHI, KOLKATA, JUNE 17

THE RAIL accident near New Jalpaiguri station that claimed nine lives could be because of negligence on part of the goods train's loco pilot, a prima facie assessment of the incident has found. Documents accessed by *The Indian Express* also show that the automatic signalling system on the line was down and the trains were given 'paper line clearance' by the Rangapani station manager to cross.

The goods train had rammed the Kanchanjunga Express from the rear, derailing three of its coaches.

"Prima facie, it appears to be human error but we will know more after the inquiry," Railway Board chairperson Jaya Varma Sinha told reporters. **CONTINUED ON PAGE 2**



An assistance booth at Sealdah station for information on passengers, Monday. Partha Paul

**MORE REPORTS**  
[PAGE 7](#)



A tragic rail accident occurred on June 17, near New Jalpaiguri station in West Bengal's Darjeeling district, when a goods train collided with the Sealdah-bound Kanchanjunga Express from Agartala. The incident resulted in nine fatalities and over 40 injuries.

## **Context and Background of the Article**

The collision took place at 8:55 am, 11 km from New Jalpaiguri station. The impact derailed three coaches of the Kanchanjunga Express and trapped passengers, making rescue operations challenging. The deceased included seven passengers, the loco pilot of the goods train, and another railway staff member. Initial investigations suggest human error and signal failures as potential causes.

## **How it is Relevant for BPSC Exam**

- **Disaster Management:** Understanding the causes and response to rail accidents is crucial for disaster management sections.
- **Public Administration:** Insights into railway safety protocols and administrative responses to accidents can be relevant for public administration topics.
- **Infrastructure and Safety:** The discussion on signal systems and safety measures in railways is important for infrastructure-related questions.

## **Summary of the Article (Value addition)**

- **Need for Reforms in Railway Infrastructure**
  - **Modernizing Signal Systems:**
    - The accident underscores the critical need to modernize India's railway signalling systems. Outdated and malfunctioning signals can lead to severe accidents, as seen in this incident where the automatic signalling system was down, and trains were given 'paper line clearance'.
    - Implementation of advanced digital signalling and automatic train control systems can prevent human errors and enhance safety.
  - **Upgrading Track Infrastructure:**
    - Regular maintenance and upgrading of railway tracks are essential to ensure safe and smooth train operations. Poor track conditions can contribute to derailments and accidents.
    - Investment in high-quality tracks and modern track-laying technologies can improve the overall reliability of the railway network.
  - **Enhanced Safety Protocols:**
    - Strengthening safety protocols and ensuring strict adherence can minimize the risk of accidents. This includes regular safety drills, comprehensive training for railway staff, and stringent checks on compliance with safety standards.

- Adoption of international best practices in railway safety can help India improve its safety record.
- Investment in Technology:
  - Embracing new technologies such as predictive maintenance, real-time monitoring of train operations, and AI-driven safety systems can significantly reduce the likelihood of accidents.
  - Technologies like drones and satellite imagery can be used for regular inspection and monitoring of railway infrastructure.
- Human Resource Development:
  - Continuous training and skill development for railway personnel are crucial. Ensuring that all staff are well-versed with the latest safety procedures and technologies can enhance the overall safety of train operations.
  - Establishing a culture of safety within the railway organization, where safety is prioritized at all levels, is necessary.
- Public-Private Partnerships:
  - Encouraging public-private partnerships can bring in additional investment and expertise to modernize railway infrastructure.
  - Collaboration with private firms can lead to the adoption of innovative solutions and efficient management practices.

## Conclusion

The tragic collision between the Kanchanjunga Express and a goods train near New Jalpaiguri highlights critical issues in railway safety and signal management. The incident underscores the need for rigorous safety protocols and effective disaster response mechanisms to prevent such accidents in the future. Implementing comprehensive reforms in railway infrastructure, including modernizing signal systems, upgrading tracks, enhancing safety protocols, investing in technology, and developing human resources, is crucial to ensuring the safety and efficiency of India's railway network.



# NSAs meet: India, US pledge to deepen partnership in critical and new technologies



US National Security Advisor Jake Sullivan meets Prime Minister Narendra Modi in New Delhi on Monday. ANI

**SHUBHAJIT ROY**  
NEW DELHI, JUNE 17

IN THE first official visit from the US since Prime Minister Narendra Modi was re-elected for a third-term, US National Security Advisor Jake Sullivan met National Security Advisor Ajit Doval and agreed to strengthen cooperation in a range of areas — Defence technology, Space, Artificial Intelligence, High-Performance Computing, critical minerals among others.

Sullivan, who is in India on a two-day official visit beginning Monday, also met External Affairs minister S Jaishankar.

According to a joint fact-sheet, Doval and Sullivan chaired the second meeting of the India-US initiative on Critical and Emerging Technology (iCET) in New Delhi in which they “set the vision for the next chapter of our strategic technology partnership”.

Sullivan also met Prime

Minister Narendra Modi who tweeted: “India is committed to further strengthen the India-US comprehensive global strategic partnership for global good.”

Both sides underscored their commitment to “ensure we stay at the leading edge of innovation and enhancing coordination with like-minded nations to deliver secure, reliable, and cost-competitive technology solutions for the Indian and American people and our partners around the world,” it said.

They underscored the vital importance of “adapting our technology protection toolkits and resolved to prevent the leakage of sensitive and dual-use technologies to countries of concern”.

Both also committed to take concrete action in the coming months to address long-standing barriers to bilateral strategic trade, technology, and industrial cooperation, including in the

**CONTINUED ON PAGE 2**



# China accuses Philippines supply ship of hitting its vessel in South China Sea

REUTERS  
BEIJING, JUNE 17

CHINA AND the Philippines traded accusations over a maritime collision in the South China Sea on Monday, the latest in a series of confrontations over the disputed waters.

Meanwhile, hours later, the United States said it had com-

pleted joint naval exercises in the Philippines' exclusive economic zone (EEZ) with its treaty ally as well as Japan and Canada.

China's Coast Guard said a Philippine supply ship "deliberately and dangerously" approached a Chinese ship resulting in a collision after it "illegally intruded" near Second Thomas Shoal, a charge Manila rejected as "deceptive and misleading".

Manila declined to comment directly on the incident, but lashed out at Beijing after a Chinese coast guard statement said the Philippine transport and replenishment ship ignored China's repeated solemn warnings. "We will not dignify the deceptive and misleading claims of the China Coast Guard (CCG)," said Xerxes Trinidad, chief of the Philippine armed forces' public affairs office.





# Let's do 1991 without a crisis

If India wishes to situate itself as a 'rule-shaper', not a 'rule-taker', we need to unequivocally demonstrate our embrace of global markets



RAJAT KATHURIA

EVEN AS THE newly-elected government begins the quest for a Viksit Bharat, here is some trade policy counsel, entirely gratuitous, without provocation and with a dose of abundant humility. The period immediately after a General Election is good for breakthrough policy, and if there is an area that needs one, it is trade. For, without an increase in trade, India will be unable to emulate the successes of its East Asian neighbours and without heightened competitiveness, it will be unable to trade.

The Global Financial Crisis of 2008, the Euro Zone struggles of 2010 and the economic downturn as a result of the Covid-19 pandemic recently, all in close succession, have prompted many governments to re-think global engagements. Protectionism, industrial policy and self-reliance, once anathema for trade policy thinkers in developed countries, are now well and truly embedded in the mainstream discourse. India faces a two-pronged challenge in this regard. One is to promote its ambition of an Atmanirbhar Bharat, to make India self-reliant by being "vocal for local", that is, prioritising domestic goods over imports. This narrative sits uneasily with India's other ambition of attaining \$1 trillion worth of exports. India's export ambition cannot be achieved without integrating with global value chains (GVC), which in turn requires a healthy prescription of openness, foreign direct investment (FDI) and import competition. An import tariff or rise in protection is akin to an export tax. India's hard-earned lesson that export promotion and import substitution are conflicting policies looms large over its trade policy and economic agenda. The country needs to create a balance.

The pandemic showed the world the consequences of import disruptions. While diversifying GVCs is certainly a medium to long-term aim, it is not without costs in the short run. We are banking on the augmentation of local capacity through schemes such as production-linked incentives (PLIs) that provide performance-based financial incentives for local production. Until November 2023, PLI schemes have resulted in the production/sales of Rs 8.61 lakh crore and generated employment (direct and indirect) of over 6.78 lakh. Before that, the government exited negotiations for the Regional Comprehensive Economic Partnership (RCEP). Its existing trade deficit with China emerged as a key reason for this exit, along with the non-consideration of its key demand on cross-border movement of professionals and the influence of the cooperatives-intensive farm and dairy sector that feared competition from New Zealand and Australia among others.

India's journey towards free trade and multilateralism has been fraught with challenges. It pursued an aggressive import substitution policy during the 1980s but found import substitution and export promotion to be quite contradictory. So, during and beyond the 1991 crisis, it adopted a liberal trade policy but subsequently remained reluctant to embrace second- or third-generation trade reforms. This has been mainly due to India's experience of trade deficit with countries with which it signed trade agreements. This strong policy narrative slowed down its liberalisation and participation in GVCs.

India's economic isolationism strategy has since changed for the better. We have signed several FTAs including four FTAs since



CR Sasikumar

2021 after nine years of no agreements. These include the India-Mauritius Comprehensive Economic Cooperation and Partnership Agreement (CECPA) in 2021, the India-UAE Comprehensive Economic Partnership Agreement (CEPA), and the India-Australia Economic Cooperation and Trade Agreement (CECTA) in 2022. The latest Trade and Economic Partnership Agreement (TEPA) with EFTA countries (Switzerland, Iceland, Norway, Liechtenstein) was signed on March 10 and secured commitments of \$100 billion and 1 million direct jobs over the next 15 years.

Despite this, we are ambiguous about regional trade agreements (RTAs), mainly the Regional Comprehensive Economic Partnership (RCEP) and Comprehensive and Progressive Trans-Pacific Partnership (CPTPP). Globally, these are the two mega-regional trade agreements and India finds itself outside both. We have eternally supported multilateralism in the World Trade Organisation (WTO) and elsewhere. At the same time, we stay away from discussions on services and e-commerce in the WTO, again revealing an ambivalence to more engagement. Even if India disagrees, it is better to be part of the negotiations or in other words "in the tent", than outside it. Non-participation is often interpreted as a sign of weakness for which there is no reason whatsoever at this juncture.

There is no doubt that we now recognise the importance of deepening penetration in global markets, as reflected in flagship programmes like Make in India. Such initiatives could be helped by bilateral trade agreements, but are likely to be adversely affected by India's reluctance to join RTAs, underlining the enduring reluctance to embrace trade for its strategic advantage. The fear of China looms large, but we need to shrug off this mentality that is of no strategic advantage.

Geopolitically, India has attempted to establish itself as an important global player, aided by its hosting of the G20 presidency. It is aiming to position itself as an alternate manufacturing destination to China and

compete with other South Asian economies like Vietnam, Cambodia and Bangladesh. This is a descent — from being compared with China a decade or more ago, we now compete with lesser powers for investment. In April 2024, an RBI bulletin underscored strong investment demand and positive business and consumer sentiments as key drivers of economic growth. We urgently need to recognise that from an economic perspective, we need open global markets more than ever for exports and for creating efficiency and competition in domestic markets. But this is often couched in obscure language. Simply put, even after 25 years of the 1991 reforms, we are humouring protectionist tendencies.

In recent years, the concept of digital public infrastructure (DPI) has gained significant attention. DPI is a potentially transformative process that utilises ubiquitous digital technologies to connect people and devices. India has built public digital platforms that have transformed lives. Many countries have shown interest in them and this could be an important marker of India's soft power. It has even been called a "low-cost, software-based version of China's infrastructure-led Belt and Road Initiative." But India needs to tread this line with caution and not be dogmatic about its structure. What's more, if we wish to situate ourselves as a "rule-shaper" as opposed to a "rule-taker", we need to unequivocally demonstrate our embrace of global markets, and to use a colloquialism, "put our money where our mouth is". For a labour-abundant economy, it is far better to subsidise job creation rather than industry. Now is an opportunity to shed inhibitions and do a repeat of 1991 — without waiting for a crisis to do so.

*Kathuria is dean, School of Humanities and Social Sciences and professor of Economics at the Shiv Nadar Institution of Eminence. Views are personal*

In April 2024, an RBI bulletin underscored strong investment demand and positive business and consumer sentiments as key drivers of economic growth. We urgently need to recognise that from an economic perspective, we need open global markets more than ever for exports and for creating efficiency and competition in domestic markets. But this is often couched in obscure language. Simply put, even after 25 years of the 1991 reforms, we are humouring protectionist tendencies.



## Context and Background of the Article

This article discusses the challenges and strategies for India's trade policy in the context of the newly elected government's quest for a "Viksit Bharat" (Developed India). It highlights the importance of trade in achieving economic growth and competitiveness, drawing comparisons with East Asian countries. The article underscores the impact of recent global events such as the Global Financial Crisis of 2008, the Euro Zone struggles of 2010, and the COVID-19 pandemic on global trade policies, which have led to a shift towards protectionism and self-reliance.

## Relevance for BPSC

- **Economics:** The article provides insights into India's trade policy, import substitution vs. export promotion, and the role of FTAs (Free Trade Agreements), which are relevant for questions on economic policies and international trade.
- **Current Affairs:** Understanding India's stance on global trade agreements like RCEP and CPTPP is crucial for current affairs.
- **Geopolitics:** The comparison of India with China and other South Asian economies provides a geopolitical context that is useful for the International Relations section.
- **Public Policy:** Discussion on schemes like Production-Linked Incentives (PLIs) and Digital Public Infrastructure (DPI) can be referenced in public policy and governance questions.

## Summary of the Article

### Introduction

The article discusses the critical need for India to balance its trade policies in the quest for a developed nation, "Viksit Bharat." It emphasizes the importance of enhancing competitiveness through increased trade, drawing lessons from the successes of East Asian economies and the recent global shifts towards protectionism.

- **Context and Global Trends**
  - **Global Financial Crisis and COVID-19 Impact:**
    - The Global Financial Crisis of 2008, the Euro Zone struggles of 2010, and the economic downturn caused by the COVID-19 pandemic have led to significant disruptions in global trade.
    - These events have prompted many governments to adopt protectionist measures, industrial policies, and self-reliance strategies, deviating from previously established trade liberalization norms.
  - **East Asian Model:**
    - East Asian economies, through increased trade and integration with global value chains, have achieved remarkable economic growth and competitiveness.





- India aims to position itself as an alternate manufacturing destination to China and compete with other South Asian economies like Vietnam, Cambodia, and Bangladesh.
- However, this is a descent from being compared with China a decade ago, indicating the need for more aggressive trade and economic policies.
- Digital Public Infrastructure (DPI):
  - India has developed public digital platforms that have the potential to transform lives and boost its global influence.
  - DPI can serve as a low-cost, software-based version of China's infrastructure-led Belt and Road Initiative, showcasing India's soft power.

### **Conclusion**

The article calls for India to embrace a more open and proactive trade policy to achieve its economic and strategic goals. It emphasizes the importance of integrating with global markets, promoting job creation, and adopting a forward-looking approach to trade negotiations. The article suggests that India needs to shed its protectionist tendencies and adopt a more liberal trade policy akin to the 1991 reforms to position itself as a significant global player.

# Little rain and hot winds keep Capital on boil — day and night — this month

EXPRESS NEWS SERVICE  
NEW DELHI, JUNE 17

THE LACK of rain in Delhi has not just led to record-breaking temperatures during the day and night over the past month, but has also made May and June (so far) among the most polluted since records have been maintained.

The city has not seen a single day this month where the maximum temperature was below the 41-degree mark. This pattern has not been observed since at least 2011.

May and June usually see frequent squalls, thundershowers and gusty winds, which help clean the air. This time, however, Delhi has received only traces of rain. The winds that are blowing in from the west are hot and laden with dust.

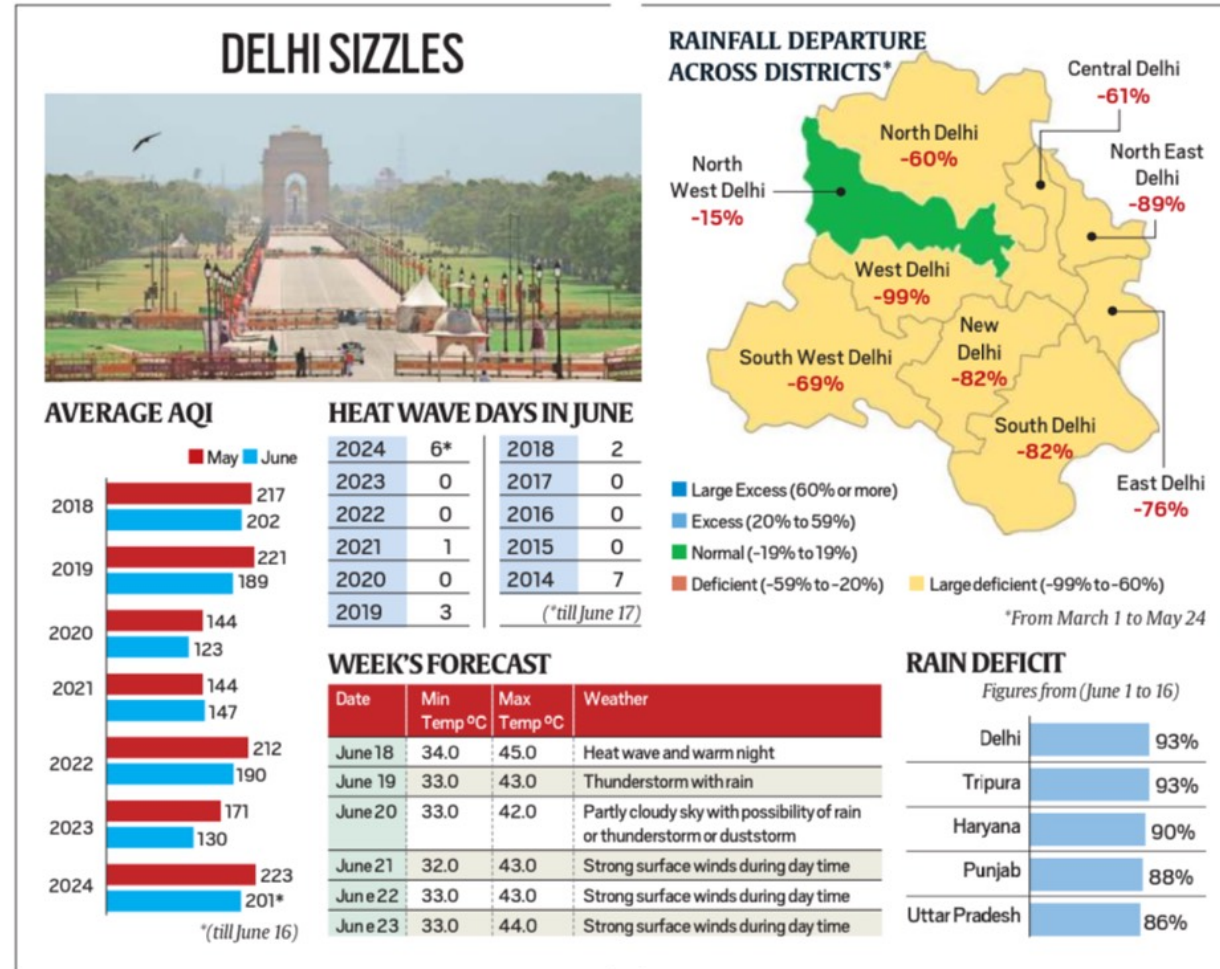
The India Meteorological Department (IMD) has issued a red alert for the city for Tuesday, with the temperatures forecast to touch 45 degrees Celsius and heat wave conditions expected in most parts of the city.

On Monday, the maximum temperature was recorded as 45.2 degrees Celsius, six degrees above normal. The minimum was recorded as 33 degrees Celsius, five degrees above normal.

During the long summer months in the plains, any respite from the heat comes only in two forms — after rains or during late nights or early mornings.

With the minimum temperature in the city having crossed the 30-degree mark on 10 out of seven days of June so far, there has been no let up.

The minimum temperature



in the city is normally around 27.5 degrees during the third week of June.

"During summers, discomfort is more significant, and more obviously felt when the minimum temperatures are high. While the maximum temperatures have been significantly above normal since the middle of May, the past

few days have been significantly hotter because the minimum temperature has been in the range of 33 degrees Celsius," said a senior IMD official.

The main reason behind the heat has been the lack of strong western disturbances — which usually bring rain to the north-western parts of the country. "In

the absence of any rain, alongside the influx of warm winds from Rajasthan and Pakistan, the city has only grown warmer, without any relief," the official added.

Slight respite from the heat is expected on Thursday, with an active western disturbance expected to bring very light rain to

the city. The maximum temperature, however, is expected to reduce only by a few degrees — to 42 degrees.

The minimum will remain between 33 and 34 degrees Celsius through the rest of the week. By Sunday, the maximum temperature is expected to rise to 44 degrees again.



# LESS TAXING

As government looks at cutting rates to boost demand, there is need for a comprehensive review of tax systems

**I**N A FEW weeks from now, Finance Minister Niramala Sitharaman will unveil the Union budget for 2024-25. The budget, the first of the newly sworn in government, will be presented against the backdrop of a continuing slump in household consumption and subdued private sector investments. In what could be an acknowledgement of the extent of this demand slump and the need for policy intervention, officials in the government are reportedly exploring the possibility of rationalising the tax structure, tinkering specifically with the tax rates for lower income segments. There is an expectation that such a proposal would help boost household consumption, thereby pushing private capex in consumer focused sectors, providing a fillip to economic activity. But, alongside such measures, there is also a need for a more comprehensive review of the tax systems in the country.

Examining the existing capital gains tax regime would be one such imperative. Considering that currently the tax rates and the holding periods vary across asset classes, bringing about some alignment could be explored. Then there is the issue of GST rate rationalisation which, unlike changes in particular income tax slabs, affects a wider segment of the population. In its 45th meeting, the GST Council had decided to form a Group of Ministers to look into this issue. One possible option could be to merge some tax slabs. There is also the matter of bringing items such as petroleum products within the ambit of GST. However, any movement on these would require getting the state governments on board. The central government must negotiate with states, ease their anxieties, and push through the necessary measures — the next meeting of the GST Council is scheduled for June 22, only a few weeks before the presentation of the Union budget.

Over the years, the government has taken various steps to increase the tax base, reduce the tax burden, and ease compliance. On the direct tax side, the number of taxpayers (individuals, companies etc) has gone up from 5.26 crore in assessment year 2013-14 to 9.37 crore in assessment year 2022-23, with individual taxpayers increasing from 4.95 crore to 8.9 crore over the same period. On the indirect tax side, there were 1.4 crore active GST taxpayers as on June 30, 2023. In comparison, in June 2018, registrations had stood at 1.12 crore. In 2019, the government had lowered the corporate tax rate to 22 per cent, and in the budget 2020-21, it had introduced a new and simplified income tax regime for individuals who forgo deductions and exemptions. More recently, in the interim budget 2024-25, the finance minister had proposed to withdraw "petty, non-verified, non-reconciled or disputed direct tax demands" up to specified limits, benefiting around one crore tax payers. These are steps in the right direction. The new government must continue on this path.





# DSR cultivation needs less water, labour; why is it still not popular in Punjab?

**ANJU AGNIHOTRI CHABA**  
JALANDHAR, JUNE 17

DIRECT SEEDING of rice (DSR), the technique of sowing promoted by the Punjab government for the past several years, has not had many takers this season as well. DSR, known as the *tar-wattar* technique of sowing, started last month, and sowing by the traditional transplantation method on June 11.

Last year, only 1.73 lakh acres of the 79 lakh acres under paddy cultivation in Punjab — only 2% — were sown by DSR. The government's target is to bring 7 lakh acres under DSR this year, less than 10% of the total rice acreage. It has offered an incentive of Rs 1,500 per acre to encourage DSR.

## DSR technique

Traditionally, farmers prepare paddy seedlings in nurseries and, after 25-35 days, replant the young plants in flooded fields. This is a labour- and water-intensive method, but is known to maximise yields

and lead to better crop health.

DSR does not require nursery preparation or transplantation. Paddy seeds are directly sown in the field 20-30 days ahead of when they would have been transplanted.

After the field has been irrigated and prepared using a laser leveler, seeding is carried out using a seed drill or lucky seeder machine. It is crucial to treat the seeds — they are soaked in a fungicide solution for eight hours, and dried for half a day before sowing.

The first round of irrigation is carried out 21 days after sowing, followed by another 14-17 rounds at 7-10 day intervals,

depending on the soil type and quality of monsoon rain. The final round of irrigation is done 10 days before harvesting.

## Benefits of DSR

*Tar-wattar* can reduce the consumption of water in cultivation by 15% to 20% — the traditional puddling method requires 3,600 to 4,125 litres of water to grow every kilogram of rice. The traditional method also requires 25-27 rounds of irrigation in all. This is extremely important in water-scarce



Direct seeding of rice (DSR) and (right) paddy transplantation. Anju Agnihotri Chaba

Punjab, where rapidly plunging groundwater levels foretell a crisis of desertification.

DSR also requires less labour, and the crop matures 7-10 days sooner, which leaves farmers more time to manage the paddy straw.

## Soil texture is key

Experts underline that for DSR to be successful, it is crucial that the soil should be suitable. There are two aspects of soil suitability.

**TEXTURE:** DSR should be avoided in soils of a light texture; it is more suitable for

heavy or medium-to-heavy-textured soils. This is primarily because light-textured soils do not retain water well.

A senior officer in the Punjab Agriculture Department told *The Indian Express* that in a bid to claim government incentives, some farmers end up using DSR in unsuitable soils, which leads to a need for irrigation every second or third day, which turns the water-saving benefits of DSR entirely on its head.

Heavy-textured soils contain more clay and less sand, whereas light-textured soils

have less clay and more sand. Dr MS Bhullar, Principal Agronomist at Punjab Agriculture University (PAU), Ludhiana, who headed the development of the *tar-wattar* DSR technique, told *The Indian Express* that only 20% of Punjab's soil is light-textured.

The Majha (northwestern) and Doaba (northeastern) regions of the state predominantly have heavy- and medium-to-heavy-textured soil, whereas Malwa (central and southern Punjab) contains pockets of heavy-textured, medium-textured, and light-textured soils.

**IRON CONTENT:** The iron content of the soil also determines the suitability of DSR. Soils that are severely deficient in iron are not suitable for *tar-wattar* DSR.

Experts say that in several places, even medium-textured soils are unsuitable only due to the lack of iron. This is likely to be more of a problem in fields where crops such as cotton, maize, and sugarcane have been cultivated earlier.

Experts say that soils with plant-available iron are ideal for DSR. In case iron supplements are being used, farmers should apply ferrous iron, which is green in colour and not oxidised, rather than oxidised iron,

which is brown in colour.

Lack of iron content can severely impact yields. Sometimes, farmers may even have to transplant the crop anyway, after a month or so, leading to DSR losing its labour-saving benefits.

## The way forward

Farmers who use DSR in unsuitable soil often do not get the expected yields, and end up developing apprehensions regarding the technique and revert to the traditional method. Negative feedback spreads quickly by word of mouth, dissuading even farmers for whose fields DSR may have been ideal.

Education and awareness of farmers is key to enable the adoption of the new technique, and departure from the older method, experts say. They suggest that extensive training and a ready helpline should be provided to handhold farmers through the entire process from pre-sowing to harvesting. This can instill confidence among farmers regarding DSR's efficacy.

Additionally, if farmers incur losses during the initial years of adoption, adequate compensation should be provided as incentive for them to try again, they say.

**EXPLAINED  
AGRICULTURE**



The article discusses the adoption challenges and potential benefits of the Direct Seeding of Rice (DSR) technique promoted by the Punjab government. Despite efforts to encourage its use, DSR has seen limited acceptance among farmers due to various practical issues.

## **Context and Background of the Article**

Direct Seeding of Rice (DSR) is a technique promoted by the Punjab government to reduce water and labor usage in paddy cultivation. Despite its potential benefits, DSR has not been widely adopted by farmers. The government aims to increase DSR adoption by offering financial incentives. The article examines the reasons behind the slow uptake and the conditions necessary for DSR to be successful.

## **How it is Relevant for BPSC Exam**

- **Agriculture:** Understanding new agricultural techniques like DSR is crucial for questions related to sustainable farming practices and water conservation.
- **Environment:** The article highlights the significance of water-saving techniques, which is relevant for environmental studies and resource management.
- **Current Affairs:** Keeping abreast of government initiatives and their impact on agriculture can be useful for current affairs sections.
- **Public Policy:** Discussing the role of government incentives and farmer support provides insights into policy-making and implementation.

## **Summary of the Article**

- **Traditional vs. DSR Method:**
  - Traditional method involves preparing seedlings in nurseries and transplanting them into flooded fields, which is labor- and water-intensive but maximizes yields.
  - DSR skips nursery preparation and directly sows seeds into the field, reducing the need for labor and water.
- **DSR Technique and Benefits**
  - **Process of DSR:**
    - Fields are irrigated and prepared using a laser leveler before sowing.
    - Seeds are treated with fungicide, soaked, and dried before being sown with a seed drill or lucky seeder machine.
    - Irrigation occurs 21 days after sowing, with subsequent rounds depending on soil type and monsoon rains.
  - **Water and Labor Savings:**
    - DSR can reduce water usage by 15-20%, compared to the traditional method that requires 3,600 to 4,125 liters of water per kilogram of rice and 25-27 rounds of irrigation.
    - The technique requires fewer labor inputs and the crop matures 7-10 days earlier, allowing more time for managing paddy straw.



- Challenges and Soil Suitability
  - Soil Texture:
    - DSR is more suitable for heavy or medium-to-heavy-textured soils, which retain water better than light-textured soils
    - Only 20% of Punjab's soil is light-textured, with most regions having medium to heavy soils.
  - Iron Content:
    - The presence of plant-available iron is crucial for DSR success. Iron-deficient soils are unsuitable and can lead to poor yields
    - Using ferrous iron supplements can improve soil suitability for DSR.
  - Practical Issues:
    - Farmers using DSR in unsuitable soils may experience poor yields and revert to traditional methods.
    - Negative experiences and word-of-mouth feedback can dissuade others from adopting DSR.
- Strategies for Adoption
  - Education and Support:
    - Educating farmers about the proper use of DSR and providing support through training and helplines can improve adoption rates.
  - Incentives and Compensation:
    - Offering compensation for initial losses can encourage farmers to continue using DSR despite early setbacks.

## Conclusion

The DSR technique offers significant benefits in terms of water and labor savings, crucial for regions like Punjab facing water scarcity. However, successful adoption depends on suitable soil conditions and adequate farmer support. By addressing these challenges through education, support, and incentives, DSR can become a viable alternative to traditional paddy transplantation.

