

To receive Daily news juice pdf on your WhatsApp, Send Your NAME and STATE through WhatsApp on 75979-00000.

1. Why direct seeding of rice (DSR) is yet to pick up in Punjab

Why in News?

The Punjab government has been actively promoting the direct seeding of rice (DSR), or 'tar-wattar' technique, This can reduce water use by 15% to 20% (the traditional puddling method requires 3,600 to 4,125 litres of water to grow a single kilo of rice). Moreover, DSR requires less labour and matures 7 to 10 days faster, giving farmers more time to manage paddy straw.

Despite these benefits, and government incentives (Rs 1,500 per acre, this year), this technique is yet to see widespread adoption in Punjab. Last year, only 1.73 lakh acres of the 79 lakh acres under paddy cultivation in Punjab saw the use of this technique. Even the government's target of bringing 7 lakh acres under DSR this year represents less than 10% of Punjab's total rice acreage.

Here is what might be holding the DSR technique back.

How DSR works

Traditionally, paddy farmers prepare nurseries where seeds are first sown. After 25-35 days, the young seedlings are uprooted and replanted, in the flooded main field. While this method is labour and water-intensive, it is known to maximise yields and maintain better crop health.



DSR, as the name suggests, requires no nursery preparation or transplantation. Paddy seeds are directly sown, roughly 20-30 days prior to when they would have been transplanted. The field is irrigated and laser leveled prior to the seeding process which is carried out using a seed drill or lucky seeder. Seed treatment is crucial, with seeds soaked in a fungicide solution for eight hours, then dried for half a day before sowing.

The first round of irrigation is carried out 21 days after sowing, followed by 14-17 more rounds at 7-10 day intervals, depending on soil type and the quality of the monsoon. The final irrigation takes place 10 days before harvest. The traditional method requires 25-27 irrigations in total.

Two requirements

Experts emphasise that soil suitability is crucial for the successful implementation of DSR.

There are two factors here.

1. Soil Texture: First is the texture of the soil. Farmers should avoid DSR in light-textured soils — it is more suitable for heavy or medium-to-heavy-textured soils. This is primarily because light-textured soils do not retain water well. Heavy-textured soils contain more clay and less sand, whereas light-textured soils have less clay and more sand.

In fact, it has been seen that in the race to avail the government incentives, some farmers use DSR in unsuitable soils, leading to the need for irrigation every second or third day. This completely counteracts the water-saving benefits of DSR, and in fact, ends up guzzling down more water.

2. Iron content: The iron content of the soil also determines the suitability of DSR. Soil with severe iron deficiency, and weed problems must not be cultivated using this technique.

In fact, experts say that in several places, even medium-textured soils are unsuitable simply due to their lack of iron. This is likely to be more of a problem in fields previously cultivated with crops such as cotton, maize, and sugarcane.

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

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

Path forward for DSR

A basic lack of awareness and understanding is holding DSR back. After using the method on unsuitable soil, farmers do not get the expected yields. They then developed apprehensions regarding DSR and reverted to their traditional puddling method. Crucially, negative feedback spreads quickly by word of mouth, further dissuading other farmers for whom DSR might have been ideal.

Experts say that comprehensively educating farmers is key to enable the adoption of a new technique, and departure from age-old, tried and tested methods. They suggest that extensive training and a ready helpline be provided, to handhold the farmers through the whole 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 also be provided, so as to not disincentivise them from trying again.

Relevance: GS Prelims & Mains Paper III; Environment

Source: Indian Express

2. Ukraine peace summit Outcome

About Peace Summit

The two-day Summit on Peace in Ukraine at the Bürgenstock resort in Switzerland ended with participants hoping for an end to the war between Russia and Ukraine. Eighty countries and four organisations of the 100 attending delegations supported the final joint communiqué that emerged out of the Path To Peace Summit looking at ways to end the Russia-Ukraine war raging on since February 2022.



Outcome

Switzerland was able to bring together more than 90 countries, at least 56 were represented by leaders, and the final joint communiqué was signed by about 82 countries and organisations, with the exception of a few including India. The document made a strong call for an end to the "ongoing war of the Russian Federation against Ukraine" and a pitch for sovereignty, territorial integrity and adherence to international law.

It cited three areas of broad understanding: nuclear safety, food security and the exchange of all prisoners of war, displaced

and detained Ukrainians.

Russia's absence

The elephant in the room though remained Russia's absence with Mr. Putin not invited by host Switzerland, leading to questions about the effectiveness of the Path to Peace Summit. It is important to note that Switzerland, unlike China, India or the United States, is also a signatory to the Rome Statute and upholds decisions of the International Criminal Court in the Hague, which has indicted Mr. Putin for alleged war crimes.

Mr. Putin's presence on Swiss soil could have paved the path for his arrest. But the conference did recognise the need to get Moscow to the dialogue table to end the war.

China's stance

Many leaders are also worried about China aligning with Russia and staying out of the Swiss summit instead of pulling its leverage on Kremlin to end the conflict.

India's stance

Only proposals acceptable to both Russia and Ukraine can lead to peace, said India as New Delhi decided to disassociate itself from the final document issued at the conclusion of a Peace Summit in Switzerland.

India was among at least seven countries that refused to endorse the "Joint Communiqué on a Peace Framework" released in Bürgenstock, the venue of the two-day summit.

Saudi Arabia, South Africa, Thailand, Indonesia, Mexico and the UAE were among the countries that refused to sign the communique. Brazil maintained an observer status, and China declined the invitation to participate.

Rationale behind India's Stance

Switzerland, Ukraine and other western countries had made a special attempt to win India's favour for the conference, including a last minute appeal by Mr. Zelenskyy when he met PM Modi at the G-7 outreach summit in Italy. As a close partner of Russia, a key Global South player, and a country that has kept a balance in the conflict, India's presence would have been a major win for the organisers.

However, while New Delhi sent the NSA and Deputy NSA to two preparatory conferences in Jeddah and Davos, the Indian delegation here was led by the Secretary (West) in the External Affairs Ministry. India has consistently abstained from every resolution at the UN, Security Council, IAEA, Human Rights Council and other multilateral fora that seeks to criticise Russia for its invasion of Ukraine.

While India may share concerns over much of the text released at the conference, it could not have gone ahead with its overtly anti-Russian slant. In its presence, however, New Delhi showed that it is willing to be part of the process, especially if it leads to a more inclusive future conference, with Russia and Ukraine at the table. As a result, India's decision to attend the conference, but not endorse its outcome, was probably a foregone conclusion.

Relevance: GS Prelims & Mains Paper II; International Relations

Source: The Hindu

3. India needs to close the gender gap

Global Gender Gap Report

The Global Gender Gap Report is published by the World Economic Forum. Now, the report covers 146 major and emerging economies. The Global Gender Gap Index is an index designed to measure gender equality. The report examines four overall areas of inequality between men and women, namely

1. Economic participation and opportunity—assessed through outcomes on salaries, participation levels and access to high-skilled employment
2. Educational attainment—assessed through outcomes on access to basic and higher-level education
3. Political empowerment—assessed through outcomes on representation in decision-making structures
4. Health and survival—assessed through outcomes on life expectancy and sex ratio.

Findings of the Report

Gender parity may be climbing upwards worldwide with the global gender gap standing at 68.5% closed in 2024, but the glacial pace of change — it was 68.4% in 2023 — is a grim statistic.

At this rate, it will take 134 years to reach full parity, the Global Gender Gap report released by the World Economic Forum (WEF) last week pointed out, “roughly five generations beyond the 2030 Sustainable Development Goal (SDG) target”.

Rankings

Iceland maintains its number 1 rank (93.5%), and is also the only economy to have closed over 90% of its gender gap.

Southern Asia			
Economy	Rank		Score
	Regional	Global	
Bangladesh	1	99	0.689
Nepal	2	117	0.664
Sri Lanka	3	122	0.653
Bhutan	4	124	0.651
India	5	129	0.641
Maldives	6	132	0.633
 Pakistan	7	145	0.570

India has slipped two places to 129 out of 146 countries. Last year, it was ranked 127, after having jumped eight places from 135 in 2022.

India has closed 64.1% of its gender gap in 2024, the report noted, leaving policy-makers with a huge window of opportunity to do better. The “slight regression,” according to the report, is mainly due to “small declines” in the spheres of education and political empowerment.

Relevance: GS Prelims & Mains Paper II; International Organisations

Source: The Hindu