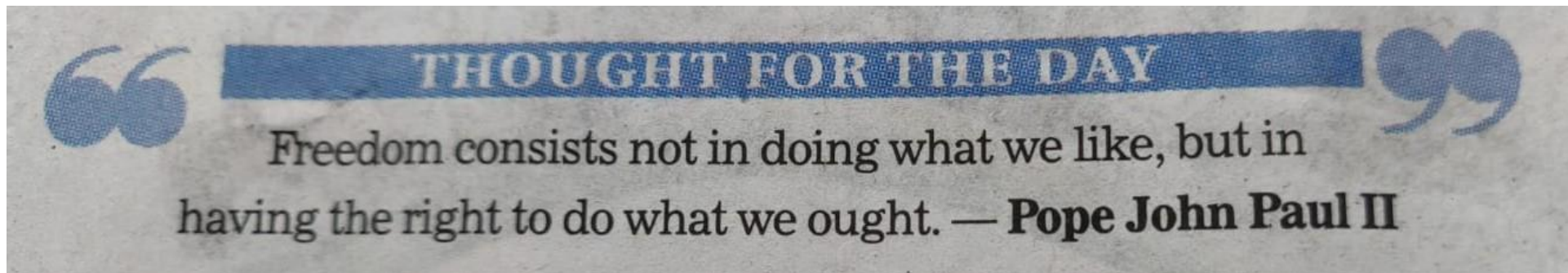


## BASAI News Updates

August 15, 2022





# PM greets people on Independence Day

Posted On: 15 AUG 2022 7:10AM by PIB Delhi

The Prime Minister, Shri Narendra Modi has greeted the people on the occasion of Independence Day.

In a tweet, the Prime Minister said;

"देशवासियों को #स्वतंत्रतादिवस की हार्दिक शुभकामनाएं। जय हिंद!

Greetings on this very special Independence Day. Jai Hind!"

# Foodgrain output set to drop due to uneven monsoon rains

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**NEW DELHI:** Farmers are racing against the clock to plant key summer crops, which account for nearly half of the country's annual food output, due to a highly uneven monsoon, with the sowing of rice well behind its usual pace.

Acres under key food crops has been mostly average so far, while the area under rice, the summer staple, has shrunk 12.4% compared to last year's levels, according to official sowing data reviewed by HT. India's foodgrain output is set to dip for the first time after six straight years of record production. A smaller area under rice could cut into harvests amid high cereal prices.

Overall, the area under major kharif crops tracked by the agriculture ministry lags behind last year's levels by 3.7% so far. The area under seven key summer crops stands at 96.3 million hectares, compared to last year's 100.1 million hectares.

Robust harvests are critical this year because of a global food crisis. Plentiful summer harvests help keep a lid on inflation and drive-up rural spending, boosting the wider economy.

The area under pulses showed a decline of 4%, while the acreage under oilseeds was marginally lower than last year so far. The country imports up to two-thirds of its edible oil requirement, while 16% of domestic demand for pulses is met through imports.

In rain-soaked states, such as Madhya Pradesh and Karnataka, farmers had to go for re-sowing. Heavy rains in Karnataka, Maharashtra and Madhya Pradesh have hampered the sowing of tur, a key pulses variety, whose total area, at 4.2 million hectares, is lagging by 10%. Farmers have planted 3% more coarse cereal and millets compared to last year for this time of the year, the data showed.

In the country as a whole, the June-September monsoon, which waters nearly 60% of the country's net-sown area, has



The area under major kharif crops tracked by agriculture ministry lags behind last year's levels by 3.7% so far.

been cumulatively 8% surplus.

However, the rains have been highly skewed in distribution during July, the most critical month for the planting of crops, the main reason for sluggish sowing. Eastern states have seen rainfall deficits of up to 16%, while southern states have seen 37% excess falls.

Poor rains in rice-growing states such as Uttar Pradesh (minus 43%), West Bengal (minus 22%) and Bihar (minus 37%) have dragged down paddy sowing. The agriculture ministry's data showed nearly 4.3 million hectares have gone unplanted with paddy compared to last year.

"Traders are worried that the government could impose curbs on rice exports depending on the shortfall of output," said Rahul Chauhan, an analyst with IGrain Pvt Ltd, a commodity trading firm.

India banned private wheat exports in May after an estimated 3% fall in output due to an unseasonal heatwave. A patchy monsoon is expected to crimp rice output as well.

Currently, the government has enough stocks of rice. On July 1, stocks held by the Union government stood at 31.5 million tonnes, about 133% more than the buffer requirement of 13.5 million tonnes.

Unlike wheat, India is a major exporter of rice. In 2021-22, India exported nearly 21 million tonnes of rice, about a sixth of its total output. A lower output could affect exports.

## Aug rain fails to make up for deficiency in Gangetic plains

Jayashree Nandi

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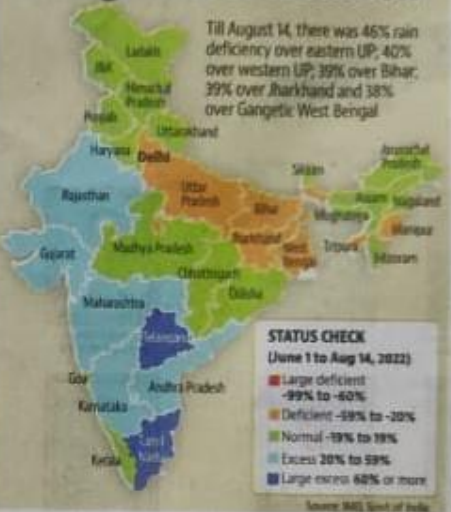
**NEW DELHI:** Rainfall in the first fortnight of August failed to make up the high deficiency over the Gangetic plains, possibly affecting the paddy crop, but heavy showers in the next 2-3 days will continue to lash central India, which has already seen some flooding and damage to crops due to excessive rains, according to the India Meteorological Department.

Delhi will see overcast skies and light rain on August 15 but no disruption is expected during Independence Day celebrations at Red Fort. "We are expecting only light rain on Independence Day," said M Mohapatra, director general of IMD.

An atmospheric low-pressure area over the northern Bay of Bengal intensified into a depression on Sunday, the weather bureau said, bringing incessant rains over Odisha and central India. The depression lay around 10km southeast of Digha in West Bengal and 90km east-northeast of Balasore in Odisha on Sunday morning and is likely to move west-northwestwards in the next 24 hours. "Heavy and widespread rain will be concentrated over Odisha, Chhattisgarh and Madhya Pradesh over the next two days," Mohapatra said. "There may be light to moderate rainfall over Uttar Pradesh and Bihar also, but not enough to compensate for high deficiency."

Till August 14, there was 46% rain deficiency over eastern Uttar Pradesh; 40% over western Uttar Pradesh; 39% over Bihar; 39% over Jharkhand and 38% over Gangetic West Bengal, the weather officer said. "We have been getting some reports of standing crops over parts of central India getting damaged due to continued rains in July and August," said Palawat. "For two to three days, there will be

## Taking stock of monsoon



patterns will change and farmers will go through a lot of difficulties, according to GV Ramjaneyulu, executive director at the Centre for Sustainable Agriculture in Hyderabad.

"Paddy and red gram will be very difficult to sow and yields will be low," he said. "There should have been a contingency plan. The farmers need government support and access to seeds for alternative crops."

There is a possibility of showers during August 18-20 in the rain deficient paddy regions, but crop will definitely be impacted due to the delays, said Mahesh Palawat, vice president of climate and meteorology at SkyMet Weather Services, a private forecaster. "We have been getting some reports of standing crops over parts of central India getting damaged due to continued rains in July and August," said Palawat. "For two to three days, there will be

widespread rain over central India."

Under the influence of the present weather systems, widespread rainfall is likely over eastern Madhya Pradesh, Jharkhand, Vidarbha, Chhattisgarh and Telangana from August 14 to 16; Gujarat on August 16 and 17; and Odisha till August 18.

Heavy rainfall is likely in Chhattisgarh and Odisha in next 24 hours. Very heavy rainfall is likely over Telangana, southern Jharkhand and Gangetic West Bengal on August 14; Konkan, Goa, eastern Madhya Pradesh, Vidarbha and Chhattisgarh on August 15; northern Maharashtra till August 16; western Madhya Pradesh on August 16 and 17; Gujarat on August 16; and over Odisha on August 18.



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# Make farming climate-resilient, future-ready

MANJIT S. KANG

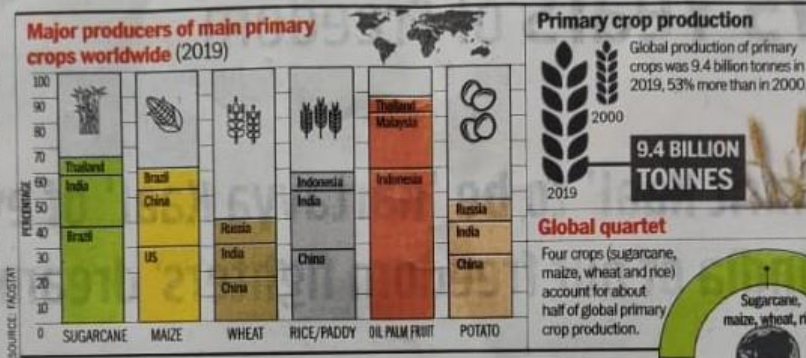
Our agriculture faces the existential challenges of climate change and water shortage. We need to be able to predict the climate with improved accuracy to tailor new crop varieties to the conditions. In the 'food bowl states', paddy cultivation should be reduced to save water. Rainwater harvesting centres need to be set up in villages. Research on crops other than rice and wheat should be accelerated.

**I**N 1947, India's population was about 330 million and the foodgrain production was around 50 million tonnes (MT). This amount was insufficient to feed the population. India could not purchase foodgrains from other countries because of lack of foreign exchange. The US Public Law 480 allowed India to purchase American foodgrains with rupees. India imported 10 MT of wheat in the early 1960s under the PL 480 programme, as a near-famine situation existed in the country.

Indian leaders were aware, however, that dependence on other countries for food could compromise the nation's freedom. Jawaharlal Nehru gave the highest priority to agriculture by declaring in 1947, "Everything else can wait but not agriculture."

The Indian government established seven agricultural universities in the country in the early 1960s on the pattern of the US land grant universities. Each university had American advisers on the campus. For example, Punjab Agricultural University (PAU) had advisers from The Ohio State University and The Agricultural University in Pant Nagar was assisted by the University of Illinois.

Prof MS Swaminathan, then at Indian Agricultural Research Institute (IARI), invited Dr Norman E. Borlaug, who had developed high-yielding, dwarf wheat varieties at the Rockefeller Foundation (now the International



Maize and Wheat Improvement Centre or CIMMYT) in Mexico, to India in 1963. Seeds of a few good varieties of wheat were imported in 1966 from Mexico and distributed among agricultural institutes. The new seeds required larger inputs — irrigation, fertilisers and pesticides — than the local varieties. PAU took the lead in developing new dwarf varieties of wheat, with acceptable grain colour and quality. Dr DS Athwal, a prominent PAU plant breeder, developed India's first high-yielding dwarf wheat 'Kalyan'.

Thanks to the improved seeds and technologies developed by PAU, IARI, and other agricultural universities/institutes, India's annual foodgrain production increased from 51 MT in 1960-61 to 213 MT in 2007-08, defying the doomsday predictions by American ecologist Paul R. Ehrlich, whose triage system cate-

gorised India as a hopeless case in his book *The Population Bomb*. This was the beginning of unprecedented gains in wheat productivity in India. Rice production showed similar gains. India became self-sufficient in cereal grains by 1974. The Government of India passed the historic Right to Food Act in 2013 to ensure food for all citizens.

The monoculture of the wheat-rice cropping system took deep roots in the 'food bowl states' of Punjab, Haryana, and western UP, as the government started purchasing only these two food-security crops at the minimum support price (MSP). Perpetuation of this unsustainable cropping system resulted in loss of crop diversification, soil-health problems and a serious decline in the water table. Even

though rice was not a food staple in the food bowl states, area under rice in Punjab alone increased from a mere 230,000 hectares\* (ha) in 1960-61 to 2.83 million ha by 2012.

India has made remarkable progress in food production. In 2021, India produced 314 MT of foodgrains, 102 MT of fruits and 200 MT of vegetables. India was expected to produce 110 MT of wheat in 2022, but because of un-seasonally high temperature in March, wheat production was 11 MT less, causing a rise in prices.

Climate change makes future production uncertain.

Many experts have indicated that the food bowl states might run out of underground water within 20 years if the exploitative rice-wheat monoculture continues.

As per FAO data, India's productivity (kg per ha) of certain important crops lags at the global level. India is behind in cereals (3,280 vs 4,070), cotton (1,380 vs 2,610), soybean (830 vs 2,780), and sunflower (660 vs 1,800). The crops where India is ahead of the global productivity are sugar crops (77,350 vs 68,460), castor (2,170 vs 1,680), and coconut (6,825 vs 5,315). For example, the gap between India's cereal productivity and the global one is 19%. Some of it can be increased through the use of cutting-edge, modern genetic technologies. New investments in agricultural research and development will be needed.

In India, 21 MT of wheat grain is lost annually to rodents, birds, fungi and moisture due to lack of scientific grain storage infrastructure. In addition, based on the UNEP's 2021 report on annual household food waste, India wastes 69 MT of food (50 kg per capita). This is happening even as 200 million people in India go to bed hungry every day.

Challenges are always opportunities to innovate — modernise the scientific research infrastructure in agricultural universities and reduce academic inbreeding. India's population is estimated

to be 1.7 billion in 2050. The National Academy of Agricultural Sciences estimated that to feed this population, India would need to produce 50% more foodgrains than produced now, 230% more fruits and 90% more vegetables.

To end hidden hunger (malnutrition, under-nutrition), emphasis should be on coarse grains such as millets and biofortification of cereals with iron, zinc and vitamin A.

The government should make serious efforts to make the ever-elusive crop diversification a reality through enhanced investments in the agricultural sector and assured marketing for alternative crops. Research on crops other than rice and wheat should be accelerated.

The biggest existential challenges our agriculture faces are climate change and water shortage. We need to be able to predict the climate with improved accuracy to tailor new crop varieties to the conditions. For example, crop breeders would need to have accurate data on future temperatures, expected frequency of droughts and rainfall patterns.

In the 'food bowl states', paddy cultivation needs to be reduced to save water. In addition, rainwater harvesting centres should be established in villages.

The dream of becoming a \$5-trillion economy by 2024 can't be fulfilled without proper investments in agriculture. Agriculture cannot be on the waiting list.

*The author is former VC, PAU*



Send your feedback to [letters@tribunemail.com](mailto:letters@tribunemail.com)



# Taking research to farmers' doorstep

**PARVEEN ARORA**  
TRIBUNE NEWS SERVICE

**KARNAL, AUGUST 14**

Chairman of Anand-headquartered National Dairy Development Board (NDDB) Meenesh Shah on Saturday announced that the NDDB and the ICAR-National Dairy Research Institute (NDRI) would work together to take the research work to the farmers' doorstep, so that they could get the benefits of the research work done by the NDRI scientists. He was chairing a silver jubilee programme of the Model Dairy plant, a part of the NDRI, which was established in 1997, with an aim to provide commercial dairy training to budding dairy scientists.

"NDRI does research work, and the NDDB does extension activities. We have jointly decided to work together so that all the research should reach to the field for quality breeding and enhancing milk production," said Shah.

While counting the challenges in dairy sector, the chairman said enhancing milk production of the milch animals was a major challenge, for which they were working. "In India, average

yield of milk of each animal is 5-6 kg per day, while it is 20-25 kg per day in other countries. We are working to enhance the milk production by improving genetic breeding, focusing on animal health care and ensuring good nutrition for animals," said Shah.

On being asked about the lumpy skin disease (LSD), he said it was a viral disease and sufficient vaccine was available to protect animals from the disease.

He also said milk production had been increasing, due to which the per capita availability has also increased. "After Independence, the per capita availability was around 100 gram per person per day, which was now 477 gram per person per day," said Shah.

Dr Manmohan Singh Chauhan, Director, NDRI, said they would provide all kind of support to the NDDB in all fields, so that suitable technologies for the farmers can be developed. "We want the farmer community to know all kinds of dairy-related updates. The NDDB will also support us in taking the research to farmers," said the Director.

