

23.05.2016

# THE HINDU

## Bundelkhand's drought-hit farmers told to cultivate oilseeds



Officials are educating Bundelkhand ryots on the benefits of growing sesame. File photo

*The U.P. government will now provide farmers a grant of Rs. 1,500 per quintal in the Kharif season and Rs. 800 per quintal in the Rabi season.*

To help farmers recover from successive crop losses in drought-affected Bundelkhand, the Uttar Pradesh government is encouraging them to increase the cultivation of oilseeds, especially sesame (til), in the coming Kharif season.

The State has increased subsidy on oilseeds. The government will now provide farmers a grant of Rs. 1,500 per quintal in the Kharif season (sesame, groundnut and soyabean) and Rs. 800 per quintal in the Rabi

season (rye, mustard, rapeseed and linseed). The grant will be applicable to all species of oilseeds ageing 15 years. Relaxing the norms in Bundelkhand, a government spokesperson said the grant payable on oilseeds would not be limited to 50 per cent.

### **Additional subsidy**

In all seven districts of Bundelkhand, officials are holding ‘ghostis’ (small meetings) to educate farmers about the benefits of cultivating sesame. As farmers feared that increase in production will bring down the price, last season the government introduced an additional Rs. 80 per kg as subsidy on the crop, said Joint Agriculture Director Pankaj Tripathi.

“We are telling farmers to not restrict sesame production for industrial use. They can also use the produce at home, as fuel — to prepare items such as puri or paranthas,” Mr. Tripathi said.

It becomes even more viable for farmers to grow sesame in view of the menace of “Annapratha” prevalent in the region. Annapratha is an age-old tradition in Bundelkhand where farmers let loose their cattle, especially the unproductive and pregnant cows, to graze freely.

“Our latest videography of fields has shown that the “anna” cattle do not eat sesame. They find it bitter. It is a safe crop to grow,” Mr. Tripathi told *The Hindu*.

To further promote sesame, ‘til laddoos’ would be introduced in anganwadis and mid-day meals, he said.

### **Abandoning cattle**

Regular droughts over the years have worsened the “Annapratha” as distressed Bundelkhand farmers are even more inclined to let loose their unproductive animals. The situation has aggravated due to the drying up of waterbodies, depletion of forest covergrazing areas.

## Farmers drop cotton cultivation



Fresh start:A farmer from Naganadoddi village in Raichur taluk prepares his field for red gram cultivation.— PHOTO: SANTOSH SAGAR

*Pink bollworm scare forces them to turn to red gram, bajra, chilli, and other alternative crops*

Hit hard by pink bollworm pest that devastated standing Bt cotton crops on around 60,000 hectares in Raichur district in the last kharif season, many farmers are turning to red gram, bajra, chilli and other alternative crops. As a result, cotton growing areas are expected to shrink by about 35 per cent.

As per data provided by the Agriculture Department, cotton was grown on around 1 lakh hectares in the district in 2014-15 and 60,000 hectares in 2015-16. The area of cultivation is expected to further diminish to around 40,000 hectares in the next kharif season.

In fact, if the district receives early and good rainfall, an even larger number could switch from cotton to red gram and bajra, bringing the area of cotton cultivation down to less than 30,000 hectares, said Kiran Kumar, Joint Director of Agriculture.

Consequently, the area of red gram, bajra and chilli are expected to expand considerably. As per the estimates made by the Agriculture Department, the area of red gram cultivation is expected to expand from 40,000 hectares (last season) to 70,000-80,000 in the next season. Similarly, the area of bajra cultivation is also likely to expand from 35,000 hectares to 45,000 hectares. The area of horticulture crops such as chilli is also expected to double.

The Karnataka Rajya Raitha Sangha (KRRS) is also making a serious attempt to wean farmers away from Bt cotton crop. KRRS State president Chamarasa Malipatil had, in a press conference recently, openly given a call to farmers not to grow Bt cotton.

“The soil and weather conditions in Raichur district are ideal for both cotton and red gram cultivation. Farmers used to traditionally grow red gram. The pink bollworm threat has encouraged them to return to it again,” Mr. Malipatil told *The Hindu* .

Virupakshi, a farmer from Nelahal village, told *The Hindu* that he had got 14 quintal of poor quality cotton against the normal yield of about 100 quintal from five acres. “Now, I am planning to switch to red gram,” he said. Siddanagowda, another farmer from the same village, said he will cultivate chilli across all his 30 acres of land this season.

***Farmers in Raichur district used to traditionally grow red gram.***

***The pink bollworm threat has encouraged them to return to it***

***Chamarasa Malipatil, KRRS State president***

## Manimuthar Fish Seed Farm's production capacity goes up



Chief General Manager, NABARD, S. Nagoor Ali Jinnah taking a look at fingerlings at Manimuthar Fish Seed Farm on Friday.

Manimuthar Fish Seed Farm's production capacity has increased from 48 lakh fingerlings per annum to 60 lakh fingerlings, thanks to the expansion taken up with the funding of NABARD (National Bank for Agriculture and Rural Development).

As this fish seed farm supplies fingerlings to in-land fish farmers of southern Tamil Nadu, demand for seed has increased over the years. Hence, NABARD allowed Rs. 12.70 crore for the expansion programme under its Rural Infrastructure Development Fund (RIDF).

The farm, created on 19 hectares, is the largest seed farm in Tamil Nadu, and it was producing 48 lakh fingerlings in the existing 50,000 square metre area. NABARD has now established 60 new nursery ponds on an area of 12,000 sq. m. to stock the fish seeds.

This additional facility is capable of creating another 12 lakh fish seeds.

Additional facilities such as a conditioning pond, with a capacity to stock 1 lakh fish seeds, and a packing centre have also been created under this

project. These ponds have been established to mainly to stock fish seeds to ensure uninterrupted supply of fingerlings to the farmers for a longer period. Water supply arrangements from the main channel of Manimuthar dam have also been strengthened as part of this project.

Chief General Manager and Officer-In-Charge of Tamil Nadu Regional Office of NABARD, S. Nagoor Ali Jinnah, accompanied by General Manager, NABARD, V. Chelladurai, visited the seed farm on Friday.

Mr. Jinnah exhorted the officials at the farm to make use of the infrastructure created by NABARD and conserve the traditional fish species by taking steps for increased fish seed production.

“The project has given facelift to the fish seed farm. With the increased capacity, the officials should ensure uninterrupted supply of fingerlings to the farmers to increase inland fish production that will consequently augment their revenue,” Mr. Jinnah said.

### **‘Work for success of planting programme’**

District in-charge Minister M.B. Patil has called upon organisations, NGOs and the public to work for the success of the extensive planting programme in the district.

Chairing a review meeting here on Saturday about the project that aims to plant 15 lakh saplings in the district this year, he said that already the Forest Department had prepared 9.54 lakh saplings.

The remaining saplings will be developed in various parts of the State and some will also be purchased from nurseries of Andhra Pradesh.

He directed the zilla panchayat CEO Sundresh Babu to convene a meeting of all 213 gram panchayat presidents and PDOs for spreading awareness about the project.

He said that already a decision has been taken to plant 3.29 lakh saplings in 89 gram panchayats. Mr. Patil asked the officials to prepare the list of remaining gram panchayats based on their requirement.

The Minister said that the Department of Horticulture has offered to cultivate 3.50 lakh saplings in its limits; the Agriculture Department has promised to cultivate 1 lakh saplings, the PWD 1 lakh, and 1 lakh plants will be planted along the side road which come under zilla panchayat limits.

“The Deputy Commissioner should identify other departments that can come forward to plant saplings in their limits,” Mr. Patil said.

The Minister asked the Deputy Commissioner to involve the NTPC plant more into the project as they have the provision under corporate social responsibility.

He said that of the 3,127 schools under the Education Department, there are playgrounds in 2,432 schools which could be used to plant saplings.

Officials of various departments were present.

*Ambitious project aims to plant*

*15 lakh saplings*

*in the district*

*this year*

## Horticulture show opens today



Workers planting various saplings at Andhra Loyola College in Vijayawada on the eve of a mango exhibition being organised by Horticulture Department and CII on Sunday.—PHOTO: CH. VIJAYA BHASKAR

: The Confederation of Indian Industry (CII) in partnership with the Department of Horticulture, government of Andhra Pradesh, is organising the Horticulture Show and Mango Festival 2016 from May 23 to 25 at Andhra Loyola College here. The inaugural session of the programme would begin at 9.30 a.m. on Monday.

Chief Minister N. Chandrababu Naidu will inaugurate the festival. Agriculture Minister Prathipati Pulla Rao who also holds the portfolios for Agri-Processing, Marketing & Warehousing, Animal Husbandry, Dairy Development and Fisheries would also participate in the inaugural function.

Over 10,000 products would be put on display at the exhibition said to be the biggest exhibition happening for the first time in the new Andhra Pradesh. Over 200 exhibitors from across the country would participate in the exhibition with specialised pavilions and farmers interactive sessions.



The State of Andhra Pradesh has a strong base in horticulture. The State is a leading producer of a variety of fruits and vegetables. In fact, Andhra Pradesh is the second largest producer of fruits in India and one of the largest vegetables producing states in the country. Andhra Pradesh is building on this advantage to create rapid economic growth to help the farming community substantially increase their income and thereby make farming a business an enterprise.

### **Govt. to promote inter-cropping in arecanut plantations under MGNREGA**

*This kind of farming is practised in only 10 p.c. of the total arecanut plantations in Shivamogga*



Highly beneficial: The Horticulture Department will provide pepper, cocoa and banana saplings at subsidised prices to the farmers under MGNREGA to be planted as an inter-crop in arecanut plantations.— FILE PHOTO

The Horticulture Department has planned to promote inter-cropping in arecanut plantations in the district under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

Under MGNREGA, financial assistance is being provided to farmers who take up cultivation of horticulture crop on their own land. At present, cultivation of arecanut, pepper, cocoa, mango, chikku, drumstick and banana can be taken up under MGNREGA.

There are provisions to pay wages to the workers and to purchase inputs, including saplings, fertilizers and pesticides under MGNREGA.

Farmers, having job cards issued under MGNREGA and who belong to the SCs, STs and those classified under the BPL category, are eligible to avail financial assistance under MGNREGA to cultivate horticulture crop on their own land.

The action plan for the work should be approved by the local Gram Panchayat.

Deputy Director of Horticulture Department M. Vishwanath told *The Hindu* that arecanut is cultivated in an area of 1.20 lakh acres of land in the district of which inter-cropping is practised in only 10 per cent of the total arecanut plantations.

In recent times, arecanut prices have remained volatile. The inter-cropping is economically beneficial to farmers. The loss due to slump in the price of one crop can be made good from the returns from other crops.

The space in the plantations can be used in an optimum manner if pepper or cocoa is cultivated as inter-crop with arecanut.

The climatic condition prevailing in the district is suitable for the cultivation of cocoa, pepper and banana as inter-crop in arecanut plantations. The returns from cultivation of these crops are also lucrative, he said.

The target to provide financial assistance under MGNREGA for cultivation of horticulture crop in 800 acres of land has been set for the district for the year 2016-17.

The area of cultivation of arecanut is increasing at a rapid pace in the district and agriculture experts have expressed apprehension that this might result in a mismatch between the demand and supply and may result in slump in the price of the produce in the future.

Mr. Vishwanath said that in order to avoid this the department has decided to promote inter-cropping in arecanut plantations under MGNREGA. The department will also provide saplings of pepper, cocoa and banana at subsidised prices to the farmers selected under MGNREGA.

Also, awareness programmes will be conducted on advantages of inter-cropping at hobli-level and the members of the local Gram Panchayats would also be involved in this initiative, he added.



### **Water crisis in Punjab: To save water, farmers adopt smarter practices, get greater yield**

Last year, Avtar Singh harvested 15 quintal per acre of cotton compared to the 8 quintal per acre that most other farmers, who used conventional methods, got.



Avtar Singh with his cotton and cucumber crop. Express Even as concern over declining water table and over exploitation of water in Punjab for paddy continues to grow, some farmers in the state are adopting innovative techniques to save water.

Avtar Singh, a farmer based in Pandwa village in Phagwara has inter-cropped cotton crop with cucumbers and is practicing capillary action irrigation which also helps in conserving water.

Last year, he had inter cropped cotton with maize which, he claims, doubled the yield. He irrigates his fields after every two weeks, helping him save a lot of water which would otherwise have been used to flood the land.

“Cotton is deep rooted and a long duration crop. It does not need much water but Punjab farmers are in habit of flooding fields,” he said. “Judicious use of water never came to them naturally.

We have inter cropped cotton with cucumber. We are not directly irrigating cotton but instead, focussing on cucumber. The water that seeps into the soil also reaches the cotton crop.

Also, through bed plantation, more water is saved.” Last year, he harvested 15quintal per acre of cotton compared to the 8 quintal per acre that most other farmers, who used conventional methods, got.

“This year picking would be even better. I have adopted concept of bio-diversity in agriculture. Farmers need to go the way nature wants and monoculture (growing single crop) is nowhere in nature. I have noticed that cotton balls are thicker if grown like this.

Growing cucumber has also controlled pests and no whitefly or bollworms have infected my crop,” he added. Paramjit Singh Gill from village Chungawan of Moga cultivated red garlic, a crop that is not familiar to Punjab, and has reaped profit of Rs 1 lakh per acre. Gill said, “I got this variety from Jammu and Kashmir and is grown mostly in hilly areas.

Punjab farmers are unaware of any garlic except white ones. This variety gives dark pinkish fruit commonly known as red garlic in J&K. Compared to Rs 25,000 per acre saved in paddy/wheat cultivation, I am saving Rs 1 lakh/acre.” Another farmer, Sukhvir Singh from village Sampla in Fatehgarh Sahib has grown onions on seven acres, muskmelon on five acres, tomatoes on two acres, chillies on two acres and pumpkin (used for sweets) on one acre.

“It was always a risky decision to give up paddy farming but now my farm is giving me Rs 70,000 to Rs 1 lakh profit.” Swaran Singh Mann, assistant director horticulture said, “It is always advisable to grow two or more crops together. Farmers are now opting for strawberries, papaya, guavas, peaches etc which consume less water than paddy.” Dr SS Kukal, additional director research (natural resources and plant health management), Punjab Agricultural University, said, “It is absolutely right that inter-cropping cotton with vegetables is best way for natural farming and saving water. With capillary action, water that seeps inside soil will come up and replenish soil. Cotton will not need separate irrigation. It saves almost 90% water and higher yield.”

## **Rajasthan to consult Israel to enhance desi cow breeds**

Agriculture minister Prabhu Lal Saini, who is back after a five-day trip to the Middle Eastern nation, said Israel had significant lessons to offer to an arid state like Rajasthan.

Rajasthan will soon be collaborating with Israel to bring in new agricultural technology for improved water management, horticulture and animal husbandry.

Agriculture minister Prabhu Lal Saini, who is back after a five-day trip to the Middle Eastern nation, said Israel had significant lessons to offer to an arid state like Rajasthan.

Saini said Rajasthan would be expanding its olive footprint significantly by encouraging farmers to plant the exotic tree over large tracts of fallow land and around National Highways.

“One agro-climatic region of Rajasthan will be developed along the lines of Israeli integrated farming comprising agriculture, animal husbandry and fishing,” Saini said.

The minister also revealed plans of importing suitable breeds of famous Israeli oranges to enhance the quality and productivity of the citrus crop in the state. In animal husbandry, the Rajasthan government would consult experts from Israel to enhance and conserve traditional breeds of cows in the state.

## **Farm insurance: Govt keeps PSU insurers out of its agri schemes**

While the farmers will have to pay only 1.5 per cent of premium for rabi crop, they will be asked to pay 2 per cent of premium for kharif crop.



The agriculture ministry has empanelled only 11 private sector companies and state-owned Agriculture Insurance Company (AIC) to implement the new schemes. (Source: Express archive) The government is implementing its ambitious farm insurance schemes, Pradhan Mantri Fasal Bima Yojana (PMFBY) and the Unified Package Insurance Scheme, without involving the four public sector general insurers, which control almost 50 per cent of the market share.

“We had strongly pleaded with both the agriculture ministry and Ministry of Finance to be part of the scheme but it seems we have not been allowed. May be they may allow us in the second phase,” said the chairman of a public sector general insurance company.

The agriculture ministry has empanelled only 11 private sector companies and state-owned Agriculture Insurance Company (AIC) to implement the new schemes. “Four PSU insurers have a wide reach and they are capable of taking these schemes to all the corners of the country. But by keeping them

away, the schemes may not achieve the desired results,” said an insurance source adding that there has been heavy lobby by the private sector insurers to exclude the Public sector insurers.

The General Insurers’ (Public Sector) Association of India (GIPSA) — the body of National Insurance Company, New India Assurance Company, Oriental Insurance Company and United India Insurance Company — has been arguing that the four PSU insurers should be considered as they have 9,000 offices and 3 lakh agents across the country. But this plea has fallen on deaf ears.

On the other hand, private players have been lobbying for the exclusion of PSU insurers, officials said.

PSU non-life insurers have been at the forefront of government sponsored socially relevant insurance schemes all along. “It is therefore surprising that they seem to have been excluded from PMFBY.

These PSUs have a wide network and presence which is a crucial factor in successful implementation of the ambitious PMFBY. Their reported exclusion raises a question mark on the success of the scheme.

It is also not clear as to the criteria adopted in reportedly excluding them. Lack of transparency and openness gives room for suspicion and allegation of foul play in selection criteria,” said K K Srinivasan, former member, IRDAI.

As per the scheme, the farmers’ share of premium under PMFBY will be based on one season, one rate. While the farmers will have to pay only 1.5 per cent of premium for rabi crop, they will be asked to pay 2 per cent of premium for kharif crop.

The remaining premium will be paid as subsidy by the Centre and states together. The scheme will be rolled out from the coming kharif season beginning June and the Centre and the states together will involve an annual



outgo of Rs 8,800 crore in terms of subsidy which will be equally shared. The premium was 3.5-8 per cent under the two existing schemes so far.

The existing National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS) are being replaced by the PMFBY.

Besides, a Pilot Unified Package Insurance Scheme aimed at covering all the insurance needs of the farmers including crop insurance, tractor insurance etc would be piloted in 45 districts across the country from next kharif season.

Furthermore, the existing Weather Based Crop Insurance Scheme and Coconut Palm Insurance Scheme would continue to operate but the premium to be paid under WBCIS has been brought on par with PMFBY.

Only one-fifth of farmers had insured their crops. "...81 per cent were found to be unaware of the practice of crop insurance. Of the uninsured, 46 per cent were found to be aware but not interested while 24 per cent said that the facility was not available to them. Only 11 per cent felt that they could not afford to pay the insurance premium," said an Assocham-Skymet Weather joint study released last year.

The study says that there are about 32 million farmers who have been enrolled in various crop insurance schemes across India.

However, issues in design, particularly related to delays in claims settlement, have led to farmers not being covered, despite significant government subsidy. In 2014-15, AIC settled Rs 5,167.58 crore in claims and underwrote Rs 2,750 crore in premium.

## **Solvent extractors hopeful of duty anomaly correction in import of crude, refined vegetable oils**

The Solvent Extractors' Association of India (SEA) is hopeful that the Centre will consider raising the duty difference between crude and refined vegetable oils for encouraging domestic refining and thereby, enable the industry to take to value addition as well.

BV Mehta, Executive Director of SEA, , told *BusinessLine*, "The government is considering a move to raise import duty difference between crude and refined oils for encouraging domestic refining, value addition, employment and fulfil the 'Make In India' call of the prime Minister."

"The difference between the duty imposed on crude oil (7.5 per cent) and refined oil (20 per cent) is 12.5 per cent. We are calling upon the government to provide a gap of 15 per cent, which will encourage local industries and make them competitive," Pravin S Lunkad, President of the Association and a representative of Pranav Agro industries Limited, said.

This, he said, was necessary as the idle capacity of oil mills can be used to refine oil after import of crude and make them competitive with the imported refined oil.

Unless this is done, the domestic processors will continue to face tough times, Lunkad said during his visit to Hyderabad on the sidelines of a conference on oil palm hosted by Malaysian Oil Palm Council.

Mehta said that the alarming increase in import of palmolein is hurting the domestic refining industry.

The import of RBD Palmolein in the past few months has significantly gone up and is projected to increase further.

While imports are going up, the domestic industry is faced with severe problem of under utilisation of capacity.

### **Hanchinal wins award for field crop research**

RR Hanchinal, Chairperson of Protection of Plant Varieties and Farmers' Rights Authority, New Delhi, has been selected for the 6th MS Swaminathan Award. A former Vice-Chancellor of University of Agricultural Sciences, Dharwad, he has also been associated with the Indonesian government as an Advisor for field crop research.

The Retired ICAR Employees Association (RICAREA) has instituted the national award since 2005. It is conferred biennially upon Indian scientists who have worked in India in any branch of agriculture to enhance productivity.

The award carries a cash prize of ₹2 lakh, a medal and a citation. RICAREA said in a release that Hanchinal was instrumental in organising the commercial seed industry in West Africa, while serving as a seed production specialist for USAID and ICRISAT.

### **States to roll out PM crop cover scheme soon**



The PMFBY insures farmers against the vagaries of nature at very low premium fixed at 2 per cent of the insured value for the kharif crop and 1.5 per cent for the rabi season

Bidding process apace to select insurance firms for Fasal Bima Yojana

The Centre's flagship crop insurance scheme, Pradhan Mantri Fasal Bima Yojana, is likely to be rolled out in several parts of the country by next month as the bidding process for selecting insurance companies is over in at least ten States and a Union Territory and many others are in the midst of it.

All top insurance companies such as Tata AIG, Iffco Tokio, Reliance, Bajaj Allianz and ICICI Lombard have expressed interest in the new scheme and participated in the bidding process.

“We just held a review meeting with States and the response has been very encouraging. Many have already finished bidding and evaluating, some are in the process, while others are preparing for it,” Agriculture Secretary Shobhana K Pattanayak told *BusinessLine*.

### **Scheme notification**

The Secretary said that States will notify the crop insurance scheme soon after the bidding process was over and the insurance companies identified.

The PMFBY insures farmers against the vagaries of nature at very low premium fixed at 2 per cent of the insured value for the kharif crop and 1.5 per cent for the rabi season.

“When the crop insurance scheme gets notified in States, farmers will start getting covered as soon as loans are sanctioned by banks,” he said.

The Centre has asked all banks to compulsorily cover all farmers that take loans under the crop insurance scheme by deducting the premium.

“Banks have also been asked to provide insurance to all farmers who have not taken loans when such farmers approach them to enrol under the scheme,” he said.

### **Premium share**

The PMFBY, launched in January, stipulates that the premium charged by insurance companies over and above the token amount paid by farmers would be shared by the Centre and States in equal measure.

Under the current insurance schemes for farmers, which would now be discontinued, the premium for farmers is much higher at 3.5 per cent to 8 per cent. States and Union Territories that have finished the bidding process and are in various stages of evaluation include Andhra Pradesh, Chattishgarh, Himachal Pradesh, Jharkhand, Madhya Pradesh, Orissa, Telangana, Uttarakhand, West Bengal, Gujarat and Andaman & Nicobar Island.

### **State-wise details**

The States where the bidding process is on include Karnataka, Maharashtra, Tripura, and Uttar Pradesh.

“Bihar, Haryana, Goa, Kerala, Rajasthan and Tamil Nadu have said that they are going to start the process soon,” Pattanayak said.

The Agriculture Ministry will hold State-wise meetings with all stakeholders including the State governments, banks and insurance companies to oversee its publicity, enforcement drive and implementation.

# Business Standard

## **Agri Business Policy could bring in Rs 10,000 cr investment to Gujarat**

During past three years, the state has attracted an investment of about Rs 3,000 crore in the farm sector



Gujarat's new agricultural policy is likely to bring in Rs 10,000 crore worth investments in the sector and allied businesses, feels the state government.

Speaking at the Ahmedabad roadshow for CII Agro Tech 2016, K S Randhawa, managing director, Gujarat Agro Industries Corporation Limited said, "Gujarat is the leading state in India in agriculture and its related businesses. Recently, the state government has announced Comprehensive Agro Business Policy 2016-21 to encourage agriculture business.

We believe that because of this policy over Rs 10,000 crore fresh investment in the state in next five years."

He added, "It has been designed to suit the most common and already existing challenges of this industry that include wastage, post-harvest losses and strongly promotes skills enhancement and creating employability.

During past three years, the state has attracted an investment of about Rs 3,000 crore in the sector.

Experts at the event felt that it's about time that the farm sector in India is treated as industry and relevant changes of mindset and models of running it are brought in.

Speaking at the event organised by the Confederation of Indian Industry (CII) here, Abhay Firodia, chairman of Force Motors Limited said that agriculture has always been seen in a low light here in India and not at all as something aspirational.

Firodia who is also a chairman of the Agro Tech 2016 said, "In India, we have never seen agriculture as an industry. Now, there is a need to change this mindset if we want the sector to grow in leaps."

Corporate involvement in agriculture is very negligible, and is required to improve agriculture and its affiliated businesses. Barring the example of Gujarat Cooperative Milk Marketing Federation (GCMMF) which owns the popular brand Amul for milk and milk products, the cooperative model has not been so successful in farm sector and it just become a group of farmers.

Firodia said, "Corporate style operation of cooperative will improve efficiency and that will open many doors of development in agriculture sector in India. This will promote innovations, strengthen the marketing aspects of it, which will ultimately benefit farmers."

Water shortage for irrigation and drinking purpose is always been an issue for India. The country need to improve its supply of water for both and focus on water conservation the experts felt.

Meanwhile, Gujarat, which recently came out with its Agriculture Policy, is participating in Agro Tech 2016 which is scheduled from November 19 to 22 at Chandigarh.

### **Catalysing growth in agriculture using technology**

AgriTech (agriculture technology) solutions not only ease the life of a farmer, but also have a huge impact on the produce of the crops, says Mohnish Sharma



Do you know why the 21st century has become synonymous with technology? There's a simple explanation for this, worldwide, right from individuals to machines, homes to industries, and various sectors have embraced technology to accomplish day to day activities.

While this has resulted in the rise of niche sectors such as FinTech, EduTech, MarTech and so on, technology has had the most important impact on agriculture. The rise of the new sector, AgriTech (agriculture technology) has revolutionised the traditional agriculture all over the world.

Closer to home, did you know that technology has been adopted by all segments of agriculture? That includes trying to make it rain through cloud seeding, monitoring the health of crops, water recycling, drone farming and so on.



These technological solutions not only ease the life of a farmer, but also have a huge impact on the produce of the crops. Thus enabling the traditional farmer to become tech-savvy.

Gone are the days when the farmers relied on the radio for the latest news updates.

Are you familiar with the fact that the Indian farmers are extensively using modern social media platforms such as Facebook, WhatsApp and so on? For networking with other farmers, to identify crop diseases and to obtain latest updates on agriculture, weather, mandi prices and government policies, farmers have formed groups on social media platforms and use mobile applications.

In this rapidly evolving digital world, the Indian Government has launched initiatives such as the Kisan Suvidha application and the National Agriculture Market (NAM), which is a nod to the growth in the adoption of technology in the agricultural space in the country.

Prime Minister Narendra Modi recently acknowledged the same by stating that “First green revolution took place at places with good water supply but second green revolution has to be powered by technology, modernisation”. While it is true that technology will lead the Indian agriculture towards its second revolution, it is also true that the traditional farmer is at ease with using global technology.

By leveraging the available technology, the farmer can not only grow a variety of crops, but can also do it at a less cost.

Advanced technology can ensure that the farmer can control and monitor almost every process of agriculture through his mobile phone and computer. This eliminates the need for putting additional man-hours on the farm and a probable increase in the yield of the crop.

What we often forget is that our economy, population and the most important of all, survival, is dependent on agriculture. A decrease in the agricultural commodity produce directly has an effect on the country's GDP.

This shows how crucial agriculture is for the growth of our country. Then why is it that even in today's technologically modern era, the farmer is still heavily dependent on traditional resources? Why does the farmer still face perils such as drought, less produce, debt and lack of quality inputs?

The grim reality is that the Indian agriculture is still vastly dependent on rainfall. The technological advances in India have somewhere not been able to keep up with the basic necessity of agriculture, water.

The recently held India Water Week addressed the issue of India facing its second consecutive drought in two years. While the Indian government has decided to collaborate with the Israeli Government to utilise Israel's water technology, the Indian government is also taking additional steps such as transporting water to drought ridden areas, plans to conduct cloud seeding, educating farmers on water conservation and so on.

Since there is a renewed revitalisation towards the Indian agriculture industry, more and more companies and start-ups are determined to help the farmers and modernise the current agriculture sector. As Mahatma Gandhi had famously said, "to forget how to dig the earth and tend the soil is to forget ourselves."

### **The story behind India's missing wheat stock**

A cool weather laden with moisture is good for the wheat crop. However, such a climate has been absent this year



India's wheat market is in a tizzy as supply projections and actual arrivals are not matching, raising a big question mark over the Centre's official production estimate for 2015-16.

The agriculture ministry in its third advance estimate of foodgrain production released earlier this month had estimated wheat output at over 94 million tonnes for the year. This itself was a bit shocking given that India has suffered two back-to-back droughts, which had pulled down the groundwater levels. Besides, the winters in 2015-16 was much less cooler than before.

A cool weather laden with moisture is good for the wheat crop. However, such a climate was not to be found this year. Nonetheless, top officials in the agriculture ministry are still hopeful that in the final analysis, there won't be any drop in production.

In fact, a senior official from the Karnal-based Directorate of Wheat Research discounted any report of shortfall in production on the grounds that arrivals in Punjab and Haryana are more than last year's.

However, the procurement figures compiled by the ministry of food and consumer affairs belied claims of a bumper harvest.

It is already May and wheat procurement in 2016-17 is only 22.8 million tonnes (mt), well below the official target of 28 mt.

## CONTRADICTIONARY NUMBERS

India's annual wheat procurement by FCI and state agencies and production in mn tonnes

	Wheat	
	Procurement	Production
2006-2007	-	75.81
2007-2008	11.12	78.57
2008-2009	22.68	80.68
2009-2010	25.82	80.80
2010-2011	22.51	86.87
2011-2012	28.33	94.88
2012-2013	38.14	93.51
2013-2014	25.09	95.85
2014-2015	28.23	86.53
2015-2016	28.08	94.04*
2016-2017**	22.77	-

\*According to third advanced estimate of food grain production for 2015-16 released on May 09, 2016

\*\*Actual procurement till May 20, 2016  
NOTE: Wheat produced in one season is marketed in the next season. So, wheat produced in 2011-2012 will be sold in 2012-2013, starting from April

Sources: Food Corporation of India and Department of Agriculture

Considering that the peak wheat procurement season ends in June just a few weeks from now, there is talk that wheat procurement in the 2016-17 season might be 23-24 mt, missing the target by 4-5 mt.

As on May 22, around 25 mt of wheat arrived in all mandis across India, compared to 29 mt in the same period last year.

Given that wheat production in 2014-15, which was marketed in 2015-16, was only 86.5 mt, it is surprising that production this year is estimated to be higher. Daily wheat arrivals in 2016-17 are tapering off compared to those of last year.

The big drop in wheat production so far has been in three states - Uttar Pradesh, Madhya Pradesh and Rajasthan - all of them hit by drought.

Wheat procurement in Madhya Pradesh in 2016-17 till May 20 has dropped by half compared to 2015-16 at 4 mt, while in Uttar Pradesh and Rajasthan, it has fallen 61 per cent and 37 per cent, respectively. The official explanation for this miserable performance particularly in Madhya Pradesh, which has become a frontline wheat producing and procurement state in the past few years, is that massive private buying due to low taxes has impacted state purchases of wheat.

But, traders and industry experts discount this. A senior official with a leading global trading firm pegged private sector purchases at 1.5-2 mt of wheat from the Indian domestic market every year. He said in no way can private players absorb the 4-5 mt shortfall the Centre might be witnessing in procurement this year.

With the international wheat market at multi-year lows owing to a global glut, it is unlikely that private traders would be purchase wheat from India to stock and sell in future.

So where has this bumper harvest gone if it is not showing in government purchases and is not being purchased by private traders?

An explanation for this could be that there is a big mismatch between the Centre's production estimate and the actual crop size. In reality, wheat crop in India this year could be much lower than what has been estimated. The subsequent advance estimates should reflect that.

## THE ECONOMIC TIMES

**Nationalised banks in Maharashtra lag behind their crop loan targets, says Kishor Tiwari**



The nationalised banks in Maharashtra have disbursed only 10% crop loans as against 40% of their targeted amount by May 31, said Kishor Tiwari.

PUNE: The nationalised banks in Maharashtra have disbursed only 10% crop loans as against 40% of their targeted amount by May 31, said Kishor Tiwari, head, Late Vasant Rao Naik Sheti Swavalanmban Mission.

"Earlier, the total share of the District Co-operative Banks in the total crop loan disbursement used to be 70%, which has now been brought down to

30%. The share of the nationalised banks has gone up to 65%. However, this year, the nationalised banks share had been raised to 70%, of which, at least 40% should have been distributed by May 10. So far, they have distributed only 10% of their share," said Tiwari, while speaking at a review meeting of the agriculture department.

He said that if farmers resort to suicides for not getting loans by May 31, the banks would be held responsible for it. "The banks have been instructed not to deduct the crop loan amount from the crop insurance compensation that the farmers get. Yet, some banks do it and they may face action," said Tiwari.

### **Centre draws five-year plan to increase pulse production to 24 million tonnes by 2021**



The strategies under the action plan include setting up 150 seed hubs across the country, providing incentive to seed growers, strengthening bio-fertiliser and bio-agent labs, distribution of seed mini-kits, enhancing breeder seed production and demonstration of improved crop production technologies.

NEW DELHI: Seeking to reduce India's dependence on imports to meet domestic demand of pulses, the Centre has drawn up a five-year roadmap to increase pulse production from nearly 17.06 million tonnes in 2015-16 to 24 million tonnes in 2020-21 through a dedicated action plan.

The aim of this plan, with a six-pronged strategy, is to increase production consistently by raising yield (production per hectare) as well as area under pulse crops in all major pulse-producing states including Madhya Pradesh, Uttar Pradesh, Bihar, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh and Telangana.

"A group, constituted for enhancement of pulse production, has brought out a five-year roadmap to achieve a production target of 24 million tonnes by 2020-21," agriculture minister Radha Mohan Singh said.

Though pulse production touched a high of 19.25 million tonnes (MT) during 2013-14, it declined to 17.15 MT in 2014-15 and further to 17.06 MT in 2015-16.

The strategies under the action plan include setting up 150 seed hubs across the country, providing incentive to seed growers, strengthening bio-fertiliser and bio-agent labs, distribution of seed mini-kits, enhancing breeder seed production and demonstration of improved crop production technologies.

### **Kharif sowing gets delayed as North sweats under heat**

Only those farmers who have access to irrigation may go for early sowing of kharif crops, as the monsoon is expected to set in a few days late this year.

PUNE: A trip to the hill stations to escape from the blistering heat in the northern plains may not bring the kind of respite you typically expect.

Some popular hill stations in Himachal Pradesh and Kashmir are unusually hot this year. The usually cool Kullu recorded nearly 37 degree Celsius on Sunday, as much as 6 degrees above normal, while in Srinagar, where the



normal is a pleasant 25, it was 31 degrees. At about 30 degrees, the temperature in Shimla was about 4 degrees more than what is normal for the Himachal capital.

Of course, these are comfortable levels when compared with the boiling northern and northwestern India.



The searing heatwave has set new records with temperatures shooting as much as 7-8 degrees above normal to around 50 degrees in several places of Rajasthan and Haryana. In most of parts of the northern, western and central India, the mercury is 3-5 degrees above normal.

The blistering heatwave is likely to bake these regions for at least another three days as the weather office has issued heatwave warnings until Wednesday. It has been a particularly harsh summer in northwestern India, which has faced quirky weather in recent years. In 2015, Rajasthan, particularly the desert area, was the only region to receive surplus rain, while the monsoon failed in the rest of the country.

The unprecedented heat raises the risk of more reservoirs drying up, and highlights the country's vulnerability to a water crisis as tens of thousands of villages are running out of drinking water, prompting authorities to take emergency measures to counter dehydration and heat stroke and to rush tankers to quench people's thirst.

Agriculture isn't affected significantly — most key crops are harvested and new ones are yet to be sown — but kharif planting may see delays if the monsoon doesn't set in as expected. Long-term crops like sugarcane and fruit orchards have been hit, though.

Meanwhile, only those farmers who have access to irrigation may go for early sowing of kharif crops, as the monsoon is expected to set in a few days late this year. But the weather office is predicting normal rains this year, which is good news for farmers after two straight years of drought. Ajay Vir Jakhar, chairman of the Bharat Krushak Samaj, said:

"The farmers, who do not have access to irrigation, will not do sowing until they get monsoon rains. But there will be only limited impact on the crop that has already been sown in the irrigated areas, as a good monsoon is expected to follow soon."

Last week, Phalodi in Rajasthan sizzled at 51 degrees, beating the national record of 50.6 degrees recorded at Alwar 60 years ago. For days, many parts of Bikaner, Churu, Barmer and Jaisalmer in Rajasthan were baked with temperatures between 45 and 50 degrees. Though most parts may get some relief from high temperatures by May-end, the core heatwave regions of Rajasthan and Madhya Pradesh, may have to bear it a little longer.

## **Cyclone Roanu is saviour of Odisha, West Bengal & Andhra Pradesh farmers**



As per the latest forecast, monsoon is likely to arrive over the Indian mainland six days later than normal and hit the Kerala coast on June 7.

KOLKATA: Tropical cyclone Roanu, which brought showers to Odisha, West Bengal and Andhra Pradesh this weekend before moving to Bangladesh, has given an opportunity to farmers in these states to prepare fields for kharif paddy well in advance, agricultural scientists said. The rains have also cheered up farmers in West Bengal and Odisha who have faced nearly 5% loss in boro or rabi paddy production this year due to a dry spell from April till early May. Boro paddy is usually sown in November and harvested in May.

"The Met department has predicted a normal or above normal rain this year, which is good for the rain-fed paddy cultivating states that are mostly located in the eastern part of the country," said AK Nayak, director, ICAR-National Rice Research Institute.

"But the rains brought by Roanu will help farmers prepare the field and go for high quality long duration crop," he said.

As per the latest forecast, monsoon is likely to arrive over the Indian mainland six days later than normal and hit the Kerala coast on June 7. Of the total annual rice production of 102 million tonnes, eastern states contribute 52-55 million tonnes. Paddy is grown over nearly 22 million hectares of land across the country.

However, agricultural scientists indicated that the continuous heatwave in eastern India that continued in April till early May is likely to lower rabi or boro paddy crop by 5% in West Bengal and Odisha.

"High temperature affects the pollination stage of the paddy crop," said Nayak. In some cases in late variety, paddy pollination may have got disturbed due to high temperature. If the temperature is above 37 degree celsius during pollination, then the process gets affected, he said.

Nayak said that at the ripening stage, if temperature is high "packing of starch" in the grain gets affected and it develops chalkiness. "In simple words, productivity may not be affected but quality suffers," he said. Scientists said in a temperature range of 22-31 degrees, the growth rate of paddy increases linearly. But higher temperature adversely affects growth.