#### 01.08.2016

### THE MORE HINDU

#### Pradhan launches Pradhan Mantri Ujjwala Yojana

The Union Minister of State (Independent Charge) of Petroleum and Natural Gas Dharmendra Pradhan today launched the Pradhan Mantri Ujjwala Yojana (PMUY) at Motihari in Bihar's East Champaran district.

Speaking at the programme, Mr. Pradhan said the ministry will allot new distributorships in East Champarat district to make cylinders and cooking fuel accessible and easily available to the people.

Besides, a new oil terminal and bottling plant has been proposed in East Champaran district at a cost of Rs 500 crore, he said adding the the natural gas pipeline from Gorakhpur may be used to supply cooking gas to the people of Motihari.

The Union Minister said BPCL has been asked to provide ambulances out of its commitment under Corporate Social Responsibility (CSR) for Motihari Engineering College and also gave commitment of the PSU's participation in recruitment from various engineering colleges of Bihar.

He handed over free LPG connections to ten women from poor socio-economic background.

The Union Agriculture and Farmers' Welfare Minister Radha Mohan Singh, a Lok Sabha Member of Parliament from East Champaran district, West Champaran MP Sanjay Jaiswal were among those present at the programme. -PTI

#### Saplings planted

Mayor P. Rajkumar and Tamil Nadu Agricultural University Vice-Chancellor K. Ramasamy led the efforts to plant saplings on Singanallur tank bund on Sunday. According to a Coimbatore Corporation release and nature enthusiasts, the two planted Chrysopogon zizanioides (vetti ver) on the tank bund and also 'kora' grass.

The nature enthusiasts said that they chose the two plant species as their fibrous root system helped in soil conservation and absorbing toxic elements from the tank.



#### Tea Board unveils accident cover for workers

Of the total Indian tea production of 1,233 million kg in 2015-16, around 33.8 per cent came from small tea gardens. File Photo

The Tea Board of India has introduced an accident insurance scheme for workers in small tea gardens at an annual premium of Rs.14. Of this, tea farmers will have to pay only Rs. 3.50 annually.

Enrolment of workers has now begun for this scheme, which will provide compensation to small tea farmers between 18 and 70 years for a Rs.2 lakh-cover, a Tea Board of India official said, adding that the master policy would be issued by Oriental Insurance in the Tea Board's name.

The share of small growers in total Indian tea production is rising. Of the total Indian tea production of 1,233 million kg in 2015-16, around 33.8 per cent came from small tea gardens.

#### **Small growers**

While the production by tea estates (as in large gardens run by corporates) increased by 1.62 per cent last fiscal, that of the bought leaf factory (BLF) sector increased by 5.81 per cent which indicated an increase in the small growers' share in production. "This is a welcome scheme for tea workers in the unorganised sector," said Bijoy Chakraborty, President, Confederation of Indian Small Tea Growers Association.

Sources said that the initiative would be funded under the 12 Plan scheme. Recognising the growing importance of this sector, the Centre had made a maiden allocation of Rs.200 crore for it in a plan of Rs.1,425 crore. "A part of this may be used for funding the insurance scheme," the Tea Board official said.

#### Steam boiler to help make quality jaggery in less time

Scientists at ANGRAU research station at Anakapalle develop it under an all-India project



P.V.K. Jagannadha Rao, principal scientist, AICRP on Post- Harvest Engineering & Technology Centre, explaining the working of the steam boiler system to a team of farmers at ANGRAU Regional Agricultural Research Station at Anakapalle in Visakhapatnam. —Photo: C.V. Subrahmanyam In spite of being the world's largest producer of jaggery, the country has not been able to exploit the export potential. Experts attribute it to the use of bleaching agent sodium hydrogen sulphate to produce bright-coloured jaggery. Food Safety Standards Authority of India (FSSAI) does not allow jaggery with more than 70 PPM for export.

#### Modernisation

However, with jaggery commanding a higher price sometimes and the growing preference for it by the health conscious provides an opportunity for producing export quality jaggery.

While sugar contains 99.9 per cent sucrose, jaggery comprises sucrose, glucose, fructose, Vitamins A, B and E and is rich in iron and calcium, according to agricultural scientists. Steam boiling is a step towards modernisation of jaggery-making. "In steam boiling, the entire heating using bagasse is done outside and water is converted into steam heating the sugarcane solution," says P.V.K. Jagannadha Rao, principal scientist, All India Coordinated Research Project (AICRP) on Post-Harvest Engineering and Technology Centre at ANGRAU Regional Agricultural Research Station, Anakapalle.

The system is developed under the AICRP project.

It keeps out the dust and particles of bagasse finding their way into the juice being boiled for jaggery.

"It saves about 17 to 20 per cent of time and gives 20 to 30 per cent better quality jaggery," says Mr. Jagannadha Rao.

The boiler system costs Rs.10 lakh and the pay back period is two years and two months, he says.

While 250 kg of jaggery a day is made using the traditional system in and around Ankapalle and about 500 kg in the Godavari districts, the boiler gives one tonne of production, he says.

It also suits sugar factories planning to divert into jaggery making and those who want to produce granulated jaggery, Mr. Jagannadha Rao elaborates.

#### Three-pan system

During a recent State-level farmers' meeting, advantages of the three-pan furnace developed by the Indian Institute of Sugarcane Research, Lucknow and the rotating filtration system developed by AICRP Centre, Kolhapur, were explained to farmers.

The three-pan system has better heating process, pipes for transferring liquid from one pan to the other and mechanical emptying of the concentrated liquid. An experienced farmer from Nellore, Babu Rao, however, differed with the estimate that each cycle would produce 100 kg and said only 50 kg would be made. The filtrati

#### **Applications invited from farmers for awards**

The University of Agricultural Sciences, Bangalore, has invited applications for the State, district and taluk-level awards from interested farmers. The awards will be presented during the Krishi Mela-2016 in November.

According to a release, the prescribed application forms can be obtained from the office of the joint directors of agriculture in the respective districts or programme coordinators of Krishi Vigyan Kendra — Hadonahalli-Doddaballapur; Chandurayanahalli-Magadi, Kandali-Hassan, Konehalli-Tiptur, V.C. Farm, Mandya, Kurubur Farm-Chintamani and Haradanahalli-Chamarajanagar), or Extension Education Unit (Naganahalli-Mysuru).

Applications can also be downloaded from the university websitewww.uasbangalore.edu.in. The last date for submission of application is October 8. For details, contact the office of the Director of Extension, University of Agricultural Sciences, Hebbal, Bengaluru – 560024, or call 080-23418883.

### Papaya cultivation gaining popularity

It assures returns and remunerative price



Papaya cultivation is gaining popularity among a section of farmers in the district, as they get assured returns and remunerative price for the produce.

A group of farmers from Annamangalam near here have taken up papaya cultivation a year ago, taking due advantage of the growing demand for the fruit with rich medicinal value.

The growing demand for their produce can be gauged from the fact that traders from Chennai arrive at the village periodically to buy the fruits, thereby extending an assured market to the farmers.

The farmers have raised a hybrid dwarf variety, 'Red lady,' which starts fruiting after a year. According to Horticulture Department officials, efforts have been taken to introduce three hectares under the crop under National Agriculture Development Programme. The crop is raised mainly in and around Annamangalam and farmers from Veppur and Perambalur have come forward to raise the crop.

#### No easy job

S. Vimal Joe, one of the farmers of Annamangalam, said it was not a easy job to cultivate papaya.

Apart from a huge investment of Rs. 2 lakh for raising 6,000 saplings on six acres about a year ago, he had to incur heavy expenditure towards labourers who plucked the fruits every day. Of the 6,000 saplings, only 4,000 germinated as the crop was prone to diseases and pest attack.

Traders preferred only quality fruits, he said. All through the first year, the crop needed proper care and maintenance.

He could harvest 500 to 700 kg of fruits every day which was sold for about Rs. 2,000 to Rs. 2,300.

His daily profit was about Rs.500. But scarcity of agricultural labour for harvesting posed a problem. "As its milk affected the skin of labourers, not many come forward to pluck the fruits," he said.

#### KVK selling curry leaf seeds

The ICAR-Krishi Vigyan Kendra (Ernakulam) of the Indian Council of Agricultural Research-Central Marine Fisheries Research Institute is selling curry leaf seeds in one-kg packets for Rs.1,100 a packet. Approximately 1,500 seedlings can be raised from one kilogram of seeds. Advance booking is open till August 16 at the CMFRI sales counter.

Seeds have to be planted approximately two cm deep in polyethylene covers measuring 15 cmx10 cm and filled with potting mixture. Germination takes 10 to 25 days and saplings will be ready for transplantation in two months. A statement issued by the KVK said the seedlings had been readied after reports on high pesticide residues in curry leafs available in market. There is growing interest among people to raise curry leaf plants for their own use at home.

However, saplings commonly available in Kerala raised from root splits do not establish well as tap roots do not develop in them. The KVK has identified that saplings raised from seeds develop tap roots and get establish easily. The curry leaf plant seedling sale is part of the KVK efforts to generate safe to eat vegetables.

#### Coconut procurement scheme fails to deliver

Even as the State budget has earmarked Rs.100 crore for coconut procurement to help farmers overcome the slump in market, there have been complaints that the scheme has failed to achieve desired results, forcing the cultivators to dispose of their produce at low price in the open market.

Although the new LDF government has revised the procurement price to Rs. 27, by raising it by Rs. 2 a kg, the farmers face a difficult situation as they can sell their produce only to the Kerala Kerakarshaka Sahakarana Federation (KERAFED) through select Krishi Bhavans, by travelling long distances to sell their produce.

#### Sales limited

However, the situation has worsened as barely 10 farmers are permitted to sell coconuts up to four quintals, that too two days a week.

Besides, the farmers' next produce comes only after a six-month interval, forcing large-scale coconut growers to dispose of their produce at Rs.15 a kg in the open market, thereby depriving them of the fruits of the new procurement scheme, said M. Ranjith Nambiar, president of 'Orala Nalikera Ulpadaka Sangam' in the hilly pocket of Kottodi in Kallar village.

#### **Memorandum sent**

The anomaly can be rectified if the authorities make use of the vast network of the co-operative marketing societies to procure the produce instead of relying on Krishi Bhavans on select days, so that the farmers pocket the procurement price as announced in the budget, Mr. Nambiar said in a memorandum sent recently to Agriculture Minister V.S. Sunil Kumar and Left Democratic Front convener Vaikom Viswan.

In a similar memorandum, the issue would soon be drawn to the attention of Chief Minister Pinarayi Vijayan, he added.

### Authorities should make use of coop. marketing societies to procure the produce, says memorandum

#### Kerala farmers seek solar fences to ward off wild animals



PREVENTIVE MEASURE: Several farmers have suffered losses after animals destroyed their crops. File photo

Forest Department not working on fencing project despite SHRC order, allege farmers

Rural farmers of Kanthaladu and Thalayadu regions have called upon the Forest Department to speed up measures for the proposed solar fencing project aimed at protecting agricultural lands close to forest fringes.

Several farmers had recently faced huge crop loss following encroachment by wild animals on farm fields.

Though some worst-hit families had recently approached the district administration seeking compensation, officials had made it clear that it was the domain of the Forest Department, which was responsible for initiating action and looking into compensation claims. However, the families complained that the department had not taken any positive step.

#### Land for fences

Meanwhile, farmer leaders said they had recently secured a favourable order from the State Human Rights Commission, which directed the Forest Department to immediately start the solar fencing work. In the order, the department was also told find its own land to erect fences.

At the same time, it was asked to explore the possibilities of acquiring land from farmers if it could not identify its own land, they claimed.

Babu Raveendran, a farmer, said wild animals, especially monkeys, were playing havoc in farm fields by destroying cacao fruits, coconuts, and other food crops.

"The construction of solar fences covering forest borders alone will put an end to the crisis. We have learnt that an order in this regard has already been issued to the Divisional Forest Conservator," he said.

#### Scheme for pokkali farming

The Agency for Development of Aquaculture Kerala (Adak) has invited applications for groups of farmers who are interested in taking up farming under its integrated project for aquaculture and pokkali farming in Cherthala.

Each group should have a minimum of five members. The members should belong to categories such as farmers, farm labourers, fisherfolk or self-help groups. Each group will have to either own or take on lease a minimum of 5 hectares of field where integrated farming could be taken up. The groups that take land on lease should have the right to do farming for at least five years. Application forms are available at the Adak regional office at Alappuzha. The last date for receipt of applications is August 30. Details are available on phone 0477- 2262322.

#### NFSM consultant visits Zaheerabad

National Food Security Mission national consultant S.M. Kolhatkar inspected Arjun Naik Thanda village in Zaheerabad of Medak district recently.

The Central government, under the NFSM, sanctioned support to women farmers of Deccan Development Society (DDS) to grow coarse cereals such as sorghum, pearl millet, finger millet, and foxtail, among others, on 235 hectares under special condition that these farmers will get support for use of their own seeds and their own ecological inputs such as manures, plant protection measures, etc., so that this becomes an external input-free programme and the government offers them cash support for all inputs they use. During the inspection, Mr. Kolhatkar looked at the biodiverse farms of DDS women farmers where coarse cereals, pulses, and oil seeds were planted together. He also enquired about the implementation of the NFSM programme and issues the farmers are facing.

He also discussed with the farmers how improved seed technology and other modern biotechnology can help increase productivity. DDS women farmers from Thanda explained how their practice is deep rooted in traditional organic farming principles, where they use their own seeds and manures and are able to fetch good yields. Cash support for the same from the government will be helpful, they said.

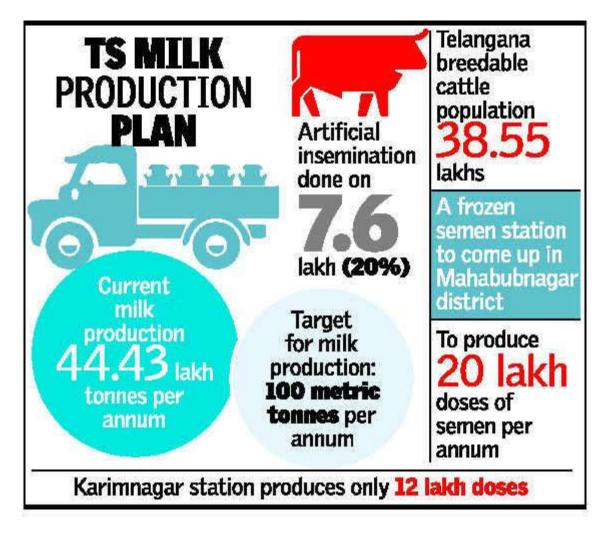
#### Telangana livestock agency to launch 'white revolution'

#### Establishment of two frozen semen stations will help achieve self-sufficiency

The Telangana State Livestock Development Agency (TSLDA) has decided to launch a 'white revolution' in the state by increasing the milk production by adding good breedable milch animals and encourage farmers to take up dairy units as alternate source of income.

Karimnagar Dairy Chairman, who is also district livestock development association (DLDA) chairman, was recently elected the TSLDA chairman. At a press conference here on Sunday, he said that Telangana was having 38.55 lakh breedable cattle population. Out of which, the artificial insemination was done for only 7.65 lakh animals by 1,289 Gopalamitras, which comes to only 20 per cent of total breedable population, he said.

The milk production in the State was only 44.43 lakh metric tonnes, he said and added that they had set a target of increasing the milk production to 100 metric tonnes in the coming few years.



In order to increase milk production, the TSLDA decided to increase artificial insemination to more number of animals by getting hybrid bulls. Presently, only one frozen bull semen station was functioning in Karimnagar with only 79 bulls. He said that they had decided to increase bulls' number to 120 very soon and increase semen production from 12 lakh doses to 30 lakh doses. Besides, another Frozen Semen Station would also be established at Kamsanpalli village in Mahbubnagar district under the National Programme on Bovine Breeding (NPBB) at a cost of Rs. 5 crore in a sprawling 36.12 acres to produce 20 lakhs frozen semen doses per annum.

Establishment of two frozen semen stations would help achieve self-sufficiency in frozen semen doses production and supply to all the farmers and help in increasing milk production. He also said that they would educate the farmers about the live stock insurance scheme for providing insurance to milching animals with the contribution of only 50 per cent of premium and remaining would be paid by Union Government. The farmers would get Rs. 1 lakh insurance per animal.

Stating that the TSLDA income through artificial insemination was only Rs. 40 lakh per month and the expenditure was Rs. 80 lakh for salaries and maintenance, he promised farmers of measures for increasing the income of the TSLDA by increasing the artificial insemination through Gopalamitras. Dairy Managing Director Shankar Reddy and others were also present.

#### Anthrax 'contained' in Ambur village

#### Over 8,500 livestock in Bairapalli village vaccinated

: Officials of the Department of Animal Husbandry, Vellore, have contained an outbreak of anthrax in a village in Ambur.

More than 8,500 livestock have been vaccinated in and around the affected village of Bairapalli in Mittalam following the death of an animal due to anthrax attack last week.

#### **Teams formed**

T. Manoharan, deputy director (Cattle Breeding and Fodder Development)cum- specialist of the department said they formed 15 teams to vaccinate the livestock against anthrax.

"We have now contained the spread of the disease and there are no more deaths. We have vaccinated a sizeable population of livestock in the affected village, and also villages located in an 8 km radius. This way, we can prevent spread of infection from the affected area," he explained.

In Bairapalli alone, 1,209 cattle, 744 sheep and, 311 goats have been vaccinated so far.

In the surrounding villages, the teams vaccinated 2,891 cattle, 86 buffaloes, 1,914 sheep and 1,677 goats.

#### Awareness created

The officials also created awareness among farmers on the symptoms of anthrax in the livestock. This included sudden death and bleeding including from the rectum and vagina.

"In such cases, the farmers should not resort to removing the skin of the animal for selling purposes. This could lead to spread of the disease," he added.

### More than 8,500 livestock have been vaccinated in and around the affected village of Bairapalli

#### Beans is back on the platter

The price of the vegetable crashed, thanks to a bumper yield

Vegetable	Price for a kg (in Rs.)*
Beans	22
Tomato	16
Onion	20
Potato	32
Brinjal	27
Lady's finger	30
Radish	22

\* AT HOPCOMS OUTLETS

Two months ago, beans was selling for a princely Rs. 180 a kg.

The price has now crashed to Rs. 10 to Rs. 20 a kg in wholesale markets, with some varieties even being sold at Rs. 5 a kg.

At Hopcoms, the vegetable costs Rs. 22 a kg, and the price is expected to fall further in the coming days.

A good spell of rain in June and July has resulted in a bumper yield.

The supply of beans, a seasonal crop, usually dips during the summer months. With the onset of the monsoon, the supply has increased.

"Last year's drought resulted in widespread loss of vegetable crops, mainly beans. So there was a shortage of for almost eight months and the price shot up. The increased price prompted our farmers to cultivate beans in a big way, and with good monsoons so far, the they have got good yield, resulting in a price crash," said a Hopcoms official.

"The city usually receives around 40 tonnes of beans every day during a good season.

Now, over 60 tonnes of beans is being dumped in the market every day. When the prices had shot up, even in March–April, it was difficult to procure even 15 tonnes of beans in the city," said a senior procurement official for a prominent retail chain in the city.

But farmers who shifted to cultivating beans expecting good prices are now staring at losses. G. Muniswamy Gowda, vegetable farmer from Devanahalli, said most farmers opted for beans this season.

Many like him, who were growing mixed crops, had increased the acreage ofbeans only to see a slump in the price now, he said.

A senior official in a retail chain said the city's markets were being flooded with beans not only from Devanahalli but also from Malur, Kolar, V. Kote and even from far off districts such as Hassan.

#### Excess rainfall poses key risk to inflation outlook: report



RAIN PAIN:Rural sentiment is dependent on agricultural prices, construction activity and government spending.— FILE PHOTO

Although monsoon has gathered pace in July after a slow start in June, there is some risk of excess rainfall and floods posing a key risk to the inflation outlook, according to a report by Edelweiss Securities.

"The key risk to benign inflation outlook arises from the possibility of excess rainfall damaging crops. In such a scenario, rural consumption could be hit," said the economy series paper on 'What does good monsoon mean for inflation' prepared by Edelweiss Securities Ltd.

Currently, CPI (excluding pulses) is 5.2 per cent against a headline CPI of 5.8 per cent. The firm expects a 60 basis point dip in CPI if pulses inflation declines to around five per cent. According to the report, monsoon was only a marginal factor in boosting rural sentiment or spending. It is far more dependent on the behaviour of agricultural prices, construction activity and government's rural spending.

Forecasting a lower inflation by September, the paper said that the correction in international food prices (corn, wheat and soybean) along with expectations of good Kharif output raises hopes on the inflation front but it does not augur well for farm-incomes and rural- spending.



#### Simply put: Problem is chana, not arhar

Unlike arhar, chana dal prices have gone up from Rs 70 since the beginning of 2016 and could further harden in the coming days.



Even if India imported practically all the chana that was available in the world market last year — the supply position here will remain tight until next March-April.

Congress vice-president Rahul Gandhi's jibe of "Arhar Modi" last week in Parliament, aimed at the BJP-led government's apparent inability to control soaring dal prices, revived a slogan that was first heard during the Bihar elections late last year. But the real problem in the coming days may be not "Arhar Modi", but rather "Chana nahin khaana".

#### Are arhar prices still on the boil?

According to the Department of Consumer Affairs, the average all-India modal retail price — the rate at which most purchases are happening — of arhar/tur (pigeon-pea) dal was Rs 140 per kg on Friday.

This was roughly 27% more than the Rs 110 rate on the same day last year, but lower than the Rs 160 levels at the start of this year.

In other words, prices are softening — albeit slowly — in contrast to the rising trend, especially during the Bihar Assembly elections last October-November.

One could expect them to soften further in the months ahead, for reasons explained below.

The real concern today is not arhar, but chana or chickpea (below), which is currently retailing at Rs 100 per kg, two-thirds higher than the Rs 60 at this time last year.

Unlike arhar, chana dal prices have gone up from Rs 70 since the beginning of 2016 and could further harden in the coming days.

#### So what explains this divergence? Are we suggesting that "Arhar Modi" is a trifle outdated and the more relevant slogan for now may be "Chana Nahi Khaana" (don't eat chana)?

Arhar, urad (black gram) and moong (green gram) are basically kharif pulses.

They are mostly sown in June-July with the onset of the southwest monsoon rains. Arhar is a 160-180 day crop that is harvested from early December.

Urad and moong are of shorter duration of 60-70 days and 80-90 days, respectively; they will, thus, start arriving in the mandis from end-September itself.

8	2016	2015	2014	2013	2012	2011	NORMAL
Arhar	42.930	25.612	25.277	31.462	24.352	33.239	40.050
Urad	26.766	19.782	16.022	18.937	16.930	21.174	24.415
Moong	26.140	18.882	14.885	19.975	11.824	20.887	23.603
Total kharif pulses**	110.345	78.247	66.525	81.612	63.867	93.500	108.693

This year, farmers have hugely expanded acreages under kharif pulses, encouraged by the high prices prevailing in the markets.

As per the Agriculture Ministry's latest data for July 27, a total area of 110.35 lakh hectares (lh) has already been planted.

As the accompanying table shows, this is not only higher than the corresponding coverage for this period during the last five years, but even the normal 108.69 lh area for the full season.

With sowings still on, the final figure for the current kharif season may well top 120 lh, which would be a record.

And with the monsoon also turning out to be very good so far, we can expect a bumper kharif crop that should take care of arhar prices at least.

Things are somewhat different with chana, which is a rabi season crop planted in October-November and harvested in March-April.

The last two years' crops have been poor, with the Agriculture Ministry pegging these at 7.48 million tonnes (mt) in 2015-16 and 7.33 mt in 2014-15, as against the all-time-high of 9.53 mt in 2013-14.

The private trade reckons the 2015-16 crop based on actual mandi arrivals to have been up to a fifth lower than Krishi Bhawan's estimate —which, perhaps, also explains the extent of price increase seen in recent months.

But more important is the next (2016-17) crop: the very fact it is due only in March-April means that the respite on the chana prices front may still be some months away.

#### But can't imports address the shortages in chana?

In 2015-16, India produced 17.06 mt of pulses and imported 5.80 mt. The latter included 2.25 mt of white/yellow peas, 1.26 mt of lentils (masur), 1.03 mt of chana, 0.58 mt of moong and urad, and 0.46 mt of arhar.

The scope for imports of chana — about three-fourths of which is from Australia and another fifth or so from Russia — is, thus, quite limited.

The Australian crop is harvested during November-December and there are reports that production there may be around 30% higher than last year's level of 1 mt.

But even if all that produce comes to India —the country imported practically all the chana that was available in the world market last year — the supply position here will remain tight until next March-April.

A more likely possibility this year is higher white/yellow pea imports — in this case, spurred by rising chana prices.

A significant part of chana beans, we know, is ground into flour or besan that goes into making a host of delicacies from pakodas, bondas and dhoklas to laddus and Mysore pak. In the past, whenever chana has turned too dear, there has been the inevitable temptation for besan manufacturers to add some white/yellow peas to their product.

The chances of it are all the more in the present scenario, where Canadian white peas are wholesaling at Rs 3,200 a quintal and chana at Rs 8,000-plus. So, watch that besan you are buying!

## Coming back to the kharif pulses, what is the current status of the crop that's been planted? Some of the areas have reportedly received too much rain. Is that cause for concern?

Rain is a problem only at the reproductive flowering and pod-setting stages.

Right now, the crops that have been planted are at the vegetative and early-leaf stages.

According to Narendra Pratap Singh, director of the Indian Institute of Pulses Research at Kanpur, excessive rain will not cause too much damage at this time,

provided there is no flooding that leads to waterlogged conditions for 24-36 hours. Farmers need to ensure that their fields are well-drained.

As things stand, it looks like "Arhar Modi" will be soon be passé.

Farmers, we have seen, have aggressively sown pulses this kharif, even diverting

large areas from soyabean to arhar and urad in Madhya Pradesh and from guarbean to moong in Rajasthan.

They will, in all likelihood, plant chana and masur just as aggressively in the coming rabi season.

#### Fishermen from Rameswaram to resume fishing from August 3

The fishermen also thanked External Affairs Minister Sushma Swaraj for taking steps to secure the release of 77 fishermen and also her assurance to retrieve 103 boats which are still in the island nation's custody.



A resolution to this effect was adopted at a meeting of Fishermen's associations in Rameswaram on Sunday state Fishermen Association president N Devadoss said.

Fishermen from coastal hamlet will resume fishing operations on August 3 after a week long stir to press for various demands, including the release of 77 fishermen in Sri Lankan custody, as the island nation has set them free.

A resolution to this effect was adopted at a meeting of Fishermen's associations in Rameswaram on Sunday state Fishermen Association president N Devadoss said.

The fishermen also thanked External Affairs Minister Sushma Swaraj for taking steps to secure the release of 77 fishermen and also her assurance to retrieve 103 boats which are still in the island nation's custody.

On July 29, Sushma Swaraj had held a high-level meeting with various stakeholders and deliberated on the different aspects of the fishermen issue with Sri Lanka.

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he meeting was attended by representatives of Tamil Nadu, Puducherry, Andhra Pradesh, Karnataka, Kerala, Odisha, 13 representatives from

Fishermen's Association of Tamil Nadu, officials of Prime Minister's Office, Coast Guard, Ministries of Agriculture, Home, Defence, External Affairs and the Indian Navy.

"External Affairs Minister chaired a meeting of internal stakeholders earlier today afternoon to discuss the way

forward towards a permanent solution to the fishermen issue between India and Sri Lanka," MEA Spokesperson Vikas Swarup said.

"The discussions between stakeholders on the Indian side focussed on different aspects requiring attention, including the livelihood concerns of Indian fishermen and introduction of sustainable fishing practices," said Swarup.

He said all stakeholders agreed with Swaraj that it was important to resolve the issues quickly.

"There was agreement amongst all stakeholders that practical and pragmatic solutions needed to be pursued so that fishermen on both sides can pursue their livelihood in a safe, secure and sustainable manner," said the MEA spokesperson.

#### Drought-hit Maharashtra headed for 40% drop in sugar production

Area under sugarcane cultivation has shrunk from 10.5 lakh hectares to 7.8 lakh hectares; sugar production declines to 50 lakh metric tonnes from last year's 84.01 lakh metric tonnes.



The sugar price in month of July was Rs 3,319 per quintal.

The sugar production in Maharashtra is likely to drop by 40 per cent due to severe drought, coupled with crop diversification, across Marathwada and parts of Western Maharashtra.

The projection report July (2016-17) shows the sugar production at 50 lakh metric tonnes. Last season, it was 84.01 lakh metric tonnes.

The 34 lakh metric tonne shortfall has raised fears of possible price rise between August and September.

The area under sugarcane cultivation also has shrunk from 10.50 lakh hectares to 7.80 lakh hectares. The primary reason cited for less cane cultivation leading to shortfall in sugar production is drought for the fourth consecutive year.

The Maharashtra State Sugar Federation has urged the Centre and the state to take note of these developments to avert price escalation in the domestic market.

Their apprehensions arises from a steep rise in sugar prices at international markets due to low production of sugar.

The sugar price in month of July was Rs 3,319 per quintal.

Sources in the Ministry of Cooperation and Marketing said the Centre and the State were working out regulatory mechanism through policy measures to ensure stable sugar prices.

A senior officer in the ministry said good rains in July-August would help boost cane cultivation in the next season. The onset of festivals beginning from August would peak the sugar demand in the domestic market. Former cooperation and marketing minister and member of the state sugar federation Harshvardhan Patil warned the government to immediately intervene.

Patil said, "Apart from the drought, there are policy failures of the government both at the Centre and in the state."



As States delay roll-out, no rich harvest yet for PM's Fasal Bima Yojana



West Bengal, Maharashtra, UP request Centre to extend deadline

Crop insurance coverage in the ongoing kharif season under the newly launched Prime Minister's Fasal Bima Yojana may be lower than 20 per cent with many States delaying its rollout and growers in areas with ample rainfall shying away from buying insurance.

Several States, including Maharashtra, Bihar, Uttar Pradesh, West Bengal and Chhattisgarh, have requested the Centre to extend the last day for insuring farmers, pleading that they started late and require more time to complete the coverage process for the 10,600-crore scheme.

The deadline for selling insurance for most crops is July 31 (now extended to August 2 because of the bank strike), while for some with a different crop cycle, it is August 15 or later in the month.

#### **Exception likely**

"We have told States that they should get insurance companies on board and then come to us for an extension, as the companies have to decide if it is feasible for them to extend the date. While the rules don't allow an extension, we can make an exception this year," a government official told *BusinessLine*.

While 22 States have carried out the tendering process for the scheme — that provides insurance at a highly subsidised and uniform rate of 2 per cent for kharif and 1.5 per cent for rabi — and 19 have notified the scheme, most of the notifications are recent. "This kharif season, we are already getting indications from States that the insurance coverage will be lower than last year's coverage of about 20 per cent, especially with a large State like Bihar yet to notify its scheme," the official said.

In Bihar, insurance sale has not started yet, while the deadline for paddy farmers is August 15. Moreover, in Maharashtra, Tamil Nadu and Karnataka, where rains have been plenty, many farmers are reluctant to buy insurance as they feel that they don't need a cover this season. "This happens in years when monsoon is good but doesn't affect the total numbers to a large extent," the official added.

#### **Confident of meeting target**

Despite low coverage this kharif, the ambitious target of covering 50 per cent of farmers under the PM's Fasal Bima Yojana in the next few years is achievable as improvement is expected from the upcoming rabi season, the official said.

The PM's Fasal Bima Yojana launched this kharif is seen as an improvement over the earlier National Agriculture Insurance Scheme because of the low and uniform premium rates, the comprehensive coverage right from pre-sowing to post-harvest, no cap on insurance cover, and the use of modern technology for accurate and quicker information on crop yields and losses.

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#### More rains forecast as 'low' forms in Bay of Bengal

The revival of the monsoon would bring fresh rain for Central India even while sustaining the wet session in parts of North-West India, which have witnessed floods over the past few days True to forecasts, a low-pressure area has formed over the Bay of Bengal signalling a revival of the monsoon over Central India, continued wet session over parts of North-West India and the West Coast.

As the monsoon readies to enter the second half, rainfall for the country as a whole during the first two months has been normal though regional deficits exist in all four meteorological regions.

#### More rain

The deficit is most pronounced in East and North-East India (-12 per cent) while the rest three homogenous regions (North-West India, Central India and South Peninsula) are in surplus.

The revival of the monsoon would bring fresh rain for Central India even while sustaining the wet session in parts of North-West India, which have witnessed floods over the past few days.

The European Centre for Medium-Range Weather Forecasts has maintained its watch for a second 'low' into the week, which could bring flooding rain into Central India as well.

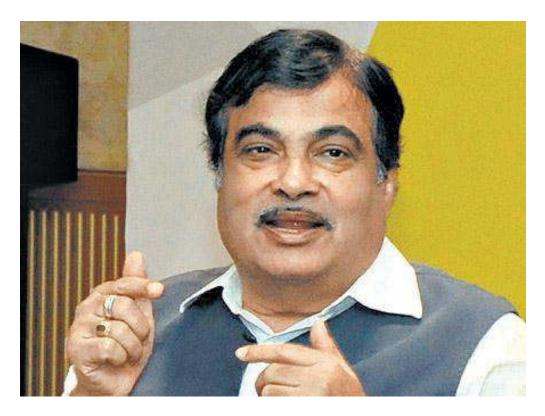
According to the US Climate Prediction Centre, Madhya Pradesh, east Rajasthan and south-west Uttar Pradesh could witness moderate to heavy rain right until August 12. During the latter week (August 6 to 12), the heavy rain belt would march back into Delhi, Chandigarh, Haryana, Punjab, Himachal Pradesh, Uttarakhand and Jammu and Kashmir.

#### **Indifferent outlook**

Gujarat, Saurashtra and Kutch, which have received deficient rainfall thus far during the monsoon, may receive normal rainfall during the first week (July 30 to August 5) but may give in to a dry spell in the next.

As for the South, the rain is expected to be normal for parts of the West Coast, western parts of Maharashtra (Madhya Maharashtra and Marathwada) during the two weeks. Heavy rain will continue to lash the northern parts of the West Coast, comprising Konkan and Goa, while it will be scattered to isolated over coastal Karnataka and Kerala. But most of Karnataka, Rayalaseema, Telangana, coastal Andhra Pradesh and Kerala may witness a dry spell while Tamil Nadu will receive normal rain, according to the US agency's forecast.

Tamil Nadu and Puducherry have been an unexpected gainer with excess rainfall of 35 per cent thus far, while Kerala has had to contend with a deficit (-24 per cent), most of it accumulated after the first week of July.



#### 'Centre to initiate process for making ethanol from biomass'

Nitin Gadkari, Minister of Shipping, Road Transport and Highways

The Centre would soon initiate measures to make ethanol out of biomass that would create "tremendous demand for farm waste," Union Minister Nitin Gadkari said.

A Cabinet note on making ethanol out of biomass like wheat, cotton and rice straw will be moved in the coming weeks which will allow blending of this biofuel into petroleum to 22.5 per cent as against 10 per cent done currently, he said here.

"The move will also create tremendous demand for farm waste. Perhaps all rice straw generated from the paddy-growing district of Bhandara, which is known as the 'rice bowl' of Vidarbha, can be used in making ethanol. At present the entire waste is being burnt away," Gadkari said.

The Union Minister was speaking last night at a seminar on Small and Medium Enterprises' (SMEs) participation in capital markets, organised by BSE and Panthomath Limited, a private advisory firm.

Stressing on the need for promoting research by SMEs, he said the city-based PSU Western Coalfields Limited (WCL) has come up with a method of separating sand from dumps created while digging coal.

He said this will bring down the cost of sand to half.

Another plan for using mine water in irrigation and as potable water is being worked out by WCL.

Using waterways can considerably reduce the cost of logistics.

There are plans to transport petroleum from Haldia port to UP and Bihar through riparian route on the Ganga river, Gadkari said, adding,

"It can reduce the cost of fuel by 2/litre there."

#### 'Progress of monsoon from here on is crucial'



#### V SHANKAR, MD, Rallis India

Usage of crop protection measures may go up with the launch of new products, says Rallis India MD Shankar

Rallis India, a Tata Group company, is cautiously optimistic on the kharif season after the delayed onset of the monsoon. After cutting down on its crop protection inventories last two quarters, it is gearing up with new product launches. V Shankar, Managing Director, Rallis India, spoke to *BusinessLine* on kharif crop and way ahead for the company. Excerpts:

How do you see the progress of the monsoon?

The onset of the monsoon was delayed by over 10 days which was really worrisome because it was the third consecutive year of deficiency. So much of expectation was built up right from February-March as everybody was forecasting a good monsoon. We were actually disappointed when there were weather disturbances. The deficiency was high at 25 per cent but slowly it started changing. By June-end, the deficiency was reduced to 11 per cent in contrast to the same month last year when it was a drought year.

Going ahead, what is your outlook for kharif crops?

We are looking forward to have positive months of July, August and September. The forecast is that rains will be normal. As long as we do not have any long dry spells like last year the crop conditions will improve. Importantly, we also should not have short big burst of rains. We have to wait and see, but right now things have dramatically improved. Usage of our products have picked up. We expect conditions should improve next quarter. Progress of monsoon from here on will be crucial.

Have you implemented any price increase?

In the first quarter, we had lot of pricing pressure. We were also cautious and had tight control on our receivables and inventories, given the conditions were tough. We have done well on cash and control over our working capital. Our finance cost has come down due to reduction in working capital. In these conditions, we have also not placed lot of stocks in the market. Of course, the June quarter has been largely of seeds through Metahelix. We were planning for a better performance but during the Rabi season the yields got affected due to water shortage. Therefore, the availability of seeds for sale was less in cotton and few hybrids in paddy and corn. In crop protection, we expect the usage to go up. The launch of new crop protection Summit cotton, soyabean and chilli crops should also help.

Are farmers cutting down on expenses?

After consequent bad seasons for last couple of years, hopefully they will not do it. They badly need a good harvest. They will not cut down on their investments. They would really want to optimise on this season. Crop protection prices have been under pressure and it may relent in the second quarter. There has been a pressure on prices – particularly for generic products where the inventories are high. In June, there was a kind of anxiety situation with delayed rains. Now that things are looking up farmers may want to capitalise on it. The stressed condition on prices should ease.

After series of pest attacks how are you seeing cotton crop this year?

I hope there will be a rebound. Yield should not get affected like last year. Prices are also firming up and the overall acreage is also down. Luckily, this year rains have washed off the pests so we are not hearing a difficult situation like last year. We hope the cotton economy will bounce back.

Have you signed any new contract manufacturing for your Dahej plant?

We have been qualified by a couple of companies and talks have moved to next phase. Globally, things are a bit stressed. They are going through a big phase of restructuring.

Things will look very different in a year's time. With consolidation and restructuring globally, outsourcing to India will increase.

Many corporates want to outsource manufacturing as a strategy because they want to be more efficient on capital.

Traditionally, lot of contracts go to China but they are looking at India as a potential source for manufacturing.

It is because costs are moving up in China and IP (intellectual property) consideration also comes into play.

Also, they are looking to diversify as they do not want to put all eggs in one basket.

They want India also to measure up to their standards in terms of agility, cost and scale. Timeline for getting the approval is one issue they face.

Sowing of rice, pulses, oilseeds keeps kharif acreage on track



Increased sowing of rice, pulses, coarse cereals and oilseeds pushed the total area covered under kharif crops till the end of July up by 6.3 per cent to 799.51 lakh hectares (lh) from a total acreage of 752.29 lh in the same period last year.

The acreage under pulses continued to expand with total sowing up to July 29 at 110.35 lh against 78.25 lh in the same period last year.

Karnataka and Maharashtra witnessed the steepest increase in acreage during the period. Pulses sowing increased to 10.01 lh (3.34 lh) in Karnataka and to 13.94 lh (8.52 lh) in Maharashtra.

Transplanting of paddy on 231.92 lh at the end of July was higher than 225.68 lh in the same period last year, with States such as Uttar Pradesh, West Bengal, Madhya Pradesh and Punjab posting an increase.

Coarse cereals sown increased to 150.76 lh (144.84 lh). While there was a rise in acreage under maize, jowar, small millets and ragi, sowing of bajra declined.

Acreage under oilseeds rose to 159.78 lh compared to 147.98 lh in the same period last year with groundnut, soyabean and sunflower higher and sesamum, niger and castor lower.

Cotton sowing picked up slightly in the last week of July as rains progressed throughout the country, with total acreage at 92.33 lh compared to last year's 101.91 lh.

The difference in acreage compared to last year narrowed to 9.6 lh from about 13 lh a week ago.

Sugarcane sowing till July 29, at 46.83 lh, marginally exceeded last year's acreage of 47.40 lh, mainly due to a slight increase in acreage in Uttar Pradesh.

Cumulative rainfall this monsoon season has been normal at 436.9 mm.

About 28 metrological sub-divisions accounting for 77 per cent of the geographical area of the country have received normal-to-excess rains,

while the remaining 8 sub-divisions have received deficient rainfall.

# **Business Standard**

#### Monsoon: Predicting an unpredictable climate system

Variations in seasonal rainfall are often related to weather in other parts of world, such as El Niño events in the Pacific Ocean



As news both good and bad pours from across India, themonsoon is once again in the limelight. From farmers, scientists and economists to astrologers, the monsoon has a significance unlike any other climate phenomenon in India.

The monsoon provides around 80% of the total rainfall in India. Getting monsoon predictions right occupies much attention of the weather department in India so that governments can make adjustments to their policies and prepare for droughts or floods according to the likely rainfall pattern.

However, the Asian monsoon, unlike its counterparts in West Africa and Australia, has been characterised by remarkable unpredictability and seasonal changes in wind direction and quantity and location of rain. Climate change due to global warming has added yet another dimension of unreliability to the monsoon. Understanding the timing, duration and intensity of the monsoon is vital if predictions of drought and flood are to be made.

Any marginal change, say a 5 to 10 per cent, in the total rainfall may appear to be small but these apparently small variations in the Indian monsoon can influence agricultural production and the stocks and commodities market in a big way. The variability of rainfall on shorter time scales has the biggest impacts.

For instance, intense heavy rainfall leads to flooding while the breaks in monsoon for over a week or more lead to water shortage and agricultural drought. Evenly distributed rainfall over the four monsoon months could be referred to as the best monsoon.

The variations in seasonal rainfall are often related to weather in other parts of the world, such as El Niño events in the Pacific Ocean. Simulations of future climate generally suggest an increase in monsoon rainfall on a seasonal mean, area-average basis.

This is due to the twin drivers of an increasing land-sea thermal contrast, but more importantly due to warming over the Indian Ocean which allows more moisture to be carried to India. Typically, increases in the total rainfall over India may be in the range of 5-10 per cent, although some climate models suggest more and some less.

The current climate models suggest greater variability in monsoon rainfall from year to year in a warmer world. In the future, it is expected that there will be extreme weather events with excessive rainfall in some years with low to very low rainfall in other years.

Most importantly, the regions that earlier experienced sufficient rainfall could face droughts while those that experienced lower rainfall could face floods frequently. The Indian summer climate in the coming century looks to be wetter on average, together with flood and drought conditions occurring more often.

It is important to build better capability to simulate the day-to-day and intraseasonal variability of monsoon in climate models with more confidence in projections. In the future, increasing population along with various developmental priorities will bring additional stresses on society and the environment, with serious implications for water resources, health and food security.

Thus, the possibility that the monsoon may become less stable as a result of climate change has serious consequences for India.

There is an urgent need to improve the science of monsoon predictions and its applications. Such measures will help millions to adapt to emerging scenarios and tide over the predicaments of climate change. Using state-of-the art climate models and observations, researchers are investigating the processes that control the monsoon rain and its variability and it is hoped that accurate scientific predictions about the unpredictable monsoon will be possible in the near future.

#### Indian drones to aid crop cover scheme

The project is funded by Department of Electronics and IT, Indian Council for Scientific Research and Information Technology Research Academy



The central government is working on a project to developindigenous drones to settle insurance claims under the newly launched crop insurance scheme — Pradhan Mantri Fasal Bima Yojana (PMFBY) — and other such products.

The drones are expected to enable insurance firms to assess damage accurately and vet claims so that settlement can be expedited. Under PMFBY, insurers have to settle claims within 45 days of the application made.

The drones, being developed by the Indian Council of Agricultural Research, are part of a comprehensive project to develop a drone-based crop and soil monitoring system using hyperspectral remote sensing sensors called Sensagri.

The project is funded by the Department of Electronics and Information Technology, Information Technology Research Academy, and Indian Council for Scientific Research.

If successful, this technology could be integrated with satellite-based technologies for large-scale applications, which would further smoothen the crop damage assessment.

Officials said drone technology-based unmanned aerial vehicles have the ability to scout over farms, gather precise information and transmit the data on a real-time basis.

The information on drone- based technology for crop damage assessment was also shared by Sudarshan Bhagat, minister of state for agriculture, in Parliament recently.

The Directorate General of Civil Aviation had in May released a draft paper with guidelines for permission to fly civil unmanned aircraft. It had highlighted the increasing civil use of unmanned aircraft for damage assessment of property and life due to natural calamity, and infrastructure monitoring. Till date, 22 states and Union territories are implementing PMFBY, of which 19 have already issued tenders.

## THE TIMES OF INDIA

#### Set up an agricultural panel in state soon: HP HC

The Himachal Pradesh high court has directed the chief secretary to ensure that a State Agriculture Commission is constituted, notified and made functional within a period of three months. The court has also directed the chief secretary to take up the matter again with the concerned ministry of the central government for declaring MSP for 107 commodities. Till then, HC directed the state government to at least formulate market intervention scheme (MIS) for these items as per its order dated March 2.

In a judgement dated July 29, the division bench of Justice Rajiv Sharma and Justice Sureshwar Thakur said that chief secretary was directed to file the status/compliance report within three months and was directed to implement broader recommendations made by the National Commission of Farmers (NCF) constituted on November 18, 2004.

The court said chief secretary has also filed the affidavit which was not satisfactory, questioning why the MSP could not be introduced. It is always open to the state to adopt MSPs recommended by the NCF for agricultural costs and prices or at its own level, court pointed out.

HC said that MSP was must to protect the interest of the farmers. It is also highlighted in the affidavit that MIS, which is implemented on the request of the state government for procurement of perishable and horticultural commodities in the event of fall in market prices.

#### Govt's agri app to help farmers rent equipment



In its bid to stay tuned to the Centre's ambitious e-governance model, the state government will soon launch an Agri App, along the lines of the Uber and Ola apps, using which farmers will be able to rent farm equipment ranging from tillers and harvesters to tractors, on an hourly and daily basis.

"The state's e-governance cell has been entrusted with the job of evolving the app model to enable sharing of agricultural machinery and implements, similar to Uber and Ola applications This is being done to deliver technology to the farmers at their doorstep and also reduce the cost they bear," said E Gnagappa, joint director (HRD), state agriculture department.

The rent on farm machinery and equipment availed using the app will be 20-25% less in comparison to the prices prevailing in the market.

Farmers who have to cough up an average rent of Rs 500 per hour for a tractor, can avail the service at Rs 300-350 once the app is launched.

Taking into cognizance the limited use of apps by farmers, the government is also considering launching a toll-free number, Gangappa added.

Karnataka has signed up with some of the leading tractor manufacturers, to help farmers. It has also tied up with a few non-profit entities to set up 175 custom hire service centres,

in each taluk of the state, where farm machinery will be available on rent.

These centres are expected to come up in the next three months. Based on the crop pattern and geographical area, the stores will stock up equipment such as harvesters and weeders.

By encouraging mechanization, the government hopes that the farmers will be able to reduce production costs by overcoming labour shortage and consequently register higher profits.

"Karnataka has a large number of small and marginal farmers, owning patches of land for whom the app will be a blessing.

Also, farmers using age-old practices will benefit the most through technological advancement, which will reduce production costs," said B Janardhan, a senior researcher at the University of Agricultural Science.

He added that farmers weren't able to afford farm machinery despite the government providing 75% subsidy.

Technology to supplement agriculture

- Rent on agricultural equipment will decrease by 25-30% once the app is launched
- While 175 custom hire service centres will be launched initially, there are plans of expanding it to 350 centres in the next 2-3 years
- As many as 1.30 lakh farmers have evinced interest in availing the services

## THE ECONOMIC TIMES

Good rainfall to bring rebound in pulses, kharif harvest



Total kharif planting is up 6.3 per cent at 799.51 lakh hectares compared to a year ago, but the output may rise even higher due to better productivity in the course of this year's normal monsoon.

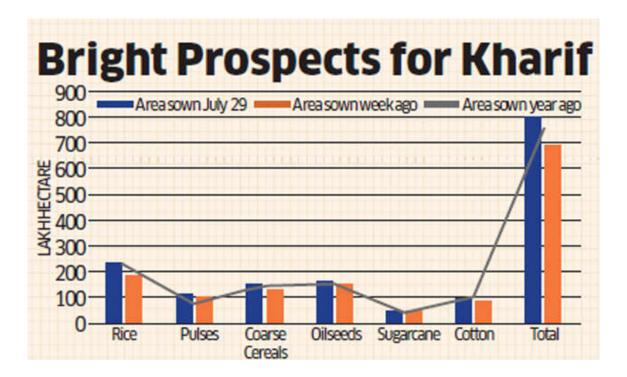
NEW DELHI: A bumper harvest of pulses along with a rebound in the kharif harvest is on the horizon because of higher planting of crops and better rainfall, which officials say will cheer farmers after two years of distress and calm food inflation.

Cultivation of pulses has expanded 41 per cent this year, which should calm soaring prices, latest official data shows. Total kharif planting is up 6.3 per cent at 799.51 lakh hectares compared to a year ago, but the output may rise even higher due to better productivity in the course of this year's normal monsoon unlike erratic and deficient rainfall in the past two years.

Ramesh Chand, a member of Niti Aayog said agricultural growth can touch 6 per cent in 2016-17 with the country receives good rains and increase in planting area.

"I expect a major impact on productivity of crop which can easily grow by 3-4 per cent. Good monsoon rains will also provide some respite to farmers facing the agrarian distress as they will be save on the input cost like diesel," he told ET.

Heavy rainfall in key agricultural areas helped total kharif planting increase by 15 per cent in a week. The increase was largely seen in acreage of rice, pulses, oilseeds and coarse cereals. The kharif crop accounts for more than half of the total food output.



Among pulses, planting of arhar rose more than 68 per cent from last year and is expected to further increase with farmers in Saurashtra region of Gujarat going for planting. Higher planting was recorded in Maharashtra, Rajasthan and Madhya Pradesh.

Rice planting, at 231.92 lakh hectare, is 2.8 per cent higher than last year. The acreage has increased largesly in Maharashtra, Bihar, Punjab and Andhra Pradesh. This kharif season rice will be planted on 392.81 lakh hectare. Area

under coarse cereals which includes maize, bajra, ragi, small millets and maize rose 4.09 per cent over the previous year to cover 150.76 lakh hectares.

Oilseeds planting increased 8 per cent from the previous to 159.78 lakh hectare, while area under groundnut saw a significant increase from the previous year and has till date been planted on 38.57 lakh hectares.

Planting of soyabean, an important commodity in the edible oil basket, has also increased and was planted on 109.16 lakh hectares. This year's monsoon has been normal so far with a surplus of 4 per cent-7 per cent in north, south and central India, which is agriculturally the most relevant. Only the east and northeast have a rainfall deficit of 12 per cent, which has contributed to the statistic of 23 per cent of the country getting deficient rain.

The agriculture ministry has set a target of producing 270.1 million tonnes of foodgrain in 2016-17 beginning June, which is 7 per cent higher than the previous year's crop.

#### Above-average rainfall sets stage for higher crop productivity

NEW DELHI: Crop prospects have brightened as July monsoon rainfall has been among the best in more than a decade, setting the stage for higher productivity from crops, which have already been planted in a bigger area than last year.

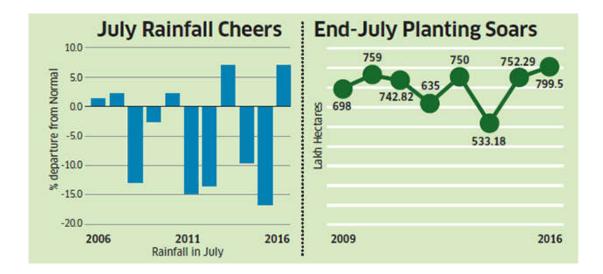
In the key agricultural month of July, rainfall was about 7% above average this year, a sharp improvement from the deficit of 10% last year and 17% in 2014. This augurs well for the growth of crops in the rabi season as rainfall was as good only once in the past decade.

Crop planting has already surpassed last year's level by 6.3% to touch 800 million hectares, latest data from the agriculture ministry shows.

Among the various crops planted so far, the area under pulses has expanded an encouraging 41%, which should calm prices after the harvest and reduce imports.

For farmers, this would be a welcome turnaround after two years of drought and the loss of one winter-sown crop due to heavy unseasonal rainfall and hailstorms that damaged crops just before the harvest.

Monsoon rainfall has been normal this season, which also helps farmers by reducing their expenditure on diesel used to pump out groundwater when dry conditions prevail.



Good rainfall this year has also filled up key water reservoirs to nearly normal levels, which has increased hydropower generation and will keep adequate reserves of water for drinking and irrigation until the next year's monsoon season.

The agriculture ministry has set a target of 270.1 million tonne of foodgrains in this crop year, which is about 7% more than last year.

Apart from pulses, farmers have also expanded cultivation of oilseeds by 7% and coarse cereals by 4% and oilseeds by 8%. Only cotton cultivation is lower than last year.

So far, the monsoon has been 4%-6% above normal in most of the country barring the east and the northeast, where it is 13% below normal. However, these regions are agriculturally not very significant and will not have much of an impact on the country's overall food production.