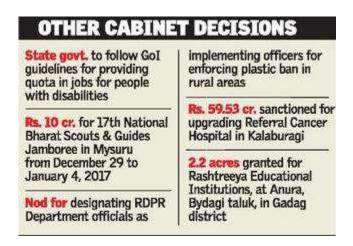
# THEMOMENTU

### 2,224 acres of farmland allotted for industrial projects



The State government has decided to allot 2,224 acres of agricultural land for industrial, health and wellness projects in different districts of the State.

A meeting of the State Cabinet on Wednesday decided to grant land under Section 109 (1a) of the Karnataka Land Reforms Act, 1961. Farmlands would be acquired and converted for industrial projects.

It was decided that 1,179 acres of agricultural land in villages of Kalaburagi district would be granted to Shree Cement, based in Rajasthan, for setting up a cement factory.

As much as 40.2 acres has been allotted to Mookambika Inc. Pvt. Ltd. for setting up a health resort near Kanakapura in Ramangaram district; 262 acres in Sedam taluk in Kalaburagi taluk for Dalmiya Cements; 673.13 acres in villages of Koppal district for Xindia Steels Ltd.; and 70.18 acres in Bidar for Gurupadappa Nagamarapalli multispeciality Hospital, Law and Parliamentary Affairs Minister T.B. Jayachandra told presspersons here. It was decided to introduce a Bill in the Belagavi session of the legislature to provide legal backup for change in names of cities such as Bengaluru, Mysuru, Kalaburagi, Tumakuru, Belagavi, Vijayapura, and Mangaluru. The Centre has already approved the change of names of these cities.

Once the Bill obtains legislature approval, there would be an automatic change in names of institutions such as Bangalore University as Bengaluru University, Tumkur University

as Tumakuru University, Bangalore Water Supply Sewerage Board as Bengaluru Water Supply Sewerage Board etc.

As per the National Disaster Response Fund, the Cabinet has sought Rs. 3,760.29 crore compensation from the Centre for relief to farmers who have lost crops owing to drought in 110 taluks and recent heavy rain in Bidar, Kalaburagi and Yadgir districts. The Cabinet discussed the crash in prices of onion in the State and decided to seek Central aid for procurement of the commodity at Rs. 11 per kg from growers. Onion crop was cultivated on 3.5 lakh acres in seven districts.

### Success story impels Agropark to expand

### **ON GROWTH MODE**

- MSMS clinics planned every month
- Services at clinics at nominal fee
- Entrepreneurs to get expert advice
- Expansion programme launch in November

Buoyed by its success in the last two years since its inception, the Piravom-based Agropark, the agri and food business incubator, is all set to spread its wings across the State.

The brand will be replicated in the remaining 13 districts under the name 'Agropark Mini'. The focus of these centres will be on introducing machines relevant to micro, small, and medium entrepreneurs in food and agriculture sectors, providing operational training and ensuring knowledge sharing.

Also, plans are afoot to conduct MSMS clinics once in a month at the proposed centres involving chemists, nutritionists, package experts, and microbiologists to be deployed by Agropark.

The clinics are aimed at helping entrepreneurs solve their myriad problems, besides extending them expert advice. The services of these clinics, to be made available at a nominal fee, will be open to entrepreneurs.

The expansion programme will be launched by the end of November.

"The centres will be set up in association with entrepreneurs associated with the field. They [entrepreneurs] will have to find space for exhibition of machines, training, and holding MSME clinics, while we will offer expertise and provide machines in association with machine manufacturing companies," Agropark Chairman Baiju Nedumkery said.

For now, incubation will be limited to Agropark at Piravom. At present, potential entrepreneurs from across the State have to travel all the way to Piravom to avail its services. Incidentally, even entrepreneurs from outside the State visit the facility.

"We have adopted a wait and watch approach on our expansion plans as we want to see how the model will evolve. Thanks to our success, we feel time is ripe for expansion," Mr. Nedumkery said.

Over 15 entrepreneurs have incubated and matured from Agropark, while another 88 are being incubated.

### Hassan seeks input subsidy of over Rs. 100 cr. from govt.



Farmers in the district have incurred heavy losses owing to deficient rainfall this year, and considering the enormity of losses, the district administration has submitted a proposal for input subsidy of Rs. 101.57 crore from the State government.

According to data complied by the Agriculture Department, crops were cultivated on 2.06 lakh hectares this kharif season. Of this, crops on 1.68 lakh hectares were affected by the dry spell. On 1.63 lakh hectares, more than 33 per cent of the crop was affected.

. During this season, paddy cultivation was targeted on 50,000 hectares. However, the total cultivated area was only 25,572 hectares, and of that crops on 17,828 hectares were affected.

Rainfall has been below normal in all parts of the district. As a result, all taluks except Sakleshpur have been declared drought-hit. The district recorded 25 per cent less than the normal monsoon rainfall. The normal rainfall expected this season (from June 1 to October 25) in the district was 802 mm, but the actual rainfall was 602 mm.

### **Subsidy calculation**

The input subsidy has been estimated for small and marginal farmers. According to the proposal, input subsidy for rain-fed area has been calculated at Rs. 6,800 a hectare and for irrigated land at Rs. 13,500 a hectare. Besides, the Agriculture Department has also sought input subsidy of Rs. 15.42 crore for big farmers. The farmers in irrigated areas were also hit by the release of Cauvery waters to Tamil Nadu, as many had sown paddy expecting water from the Hemavathi reservoir.

### Plan to set up Krishi Vigyan Kendra takes shape

The proposal to set up a Krishi Vigyan Kendra (KVK) at Garimellapadu near Kothagudem, the district headquarters town of the recently formed Bhadradri-Kothagudem district, received a major impetus from the Indian Council of Agricultural Research (ICAR), New Delhi, setting into motion the process of finalising the modalities for establishing the KVK.

According to sources, the ICAR has forwarded a letter to the Hyderabad based Agricultural Technology Application Research Institute to explore the process for signing a memorandum of understanding with the Prof. Jayashankar Telangana State Agricultural University for setting up the KVK at Garimellapadu.

The proposal took a concrete shape owing to persistent efforts by Kothagudem MLA Jalagam Venkat Rao, who took the initiative in identifying suitable land for the KVK at Garimellapadu.

### Agencies appraised

Mr. Rao apprised the agencies concerned of the imperative need for setting up the same in the predominantly tribal populated region to promote agriculture, animal husbandry, agro-forestry, fisheries, apiculture, and other allied income generation activities for the benefit of farmers.

### NASA launches Veg-03 experiment



Astronauts aboard the International Space Station have started planting their third onorbit crop of red romaine lettuce, NASA said.

"Early this morning, NASA astronaut Shane Kimbrough initiated the Veg-03 experiment, one of his first science assignments as a new crew member aboard the orbiting laboratory," the U.S. space agency said in a statement on Wednesday.

Astronomers are using a plant growth system called "Veggie" for their experiment. The Veg-03 crop will be the Veggie team's first on-orbit attempt at a new, repetitive harvest technique termed 'Cut-and-Come-Again'. "Once the plants are approximately four weeks old, a selection of leaves can be harvested for a bit of fresh lettuce and possibly science samples. Meanwhile, some leaves are left intact along with the core of the plant, and will continue to grow and produce more leaves," explained said Nicole Dufour, NASA's Veggie project manager.

"We expect this will increase the on-orbit crop yield, as well as allow for more opportunities to supplement our astronauts' diets with fresh, nutritious food from the same plants, which is an important goal of the 'pick-and-eat' food concept," Dufour noted.

The team is anxiously awaiting germination results, expected early next week, Dufour said.

Astronauts on future long-duration space missions will need to be able to grow their own food to supplement their diets.

Techniques learned from Veggie crops will help NASA prepare for the Journey to Mars.IANS

### Scientists find pests in red gram fields in Kalaburagi

Teams visiting agriculture fields in Kalaburagi district have found the presence of pests in red gram fields in Aland, Afzalpur and Jewargi in Kalaburagi district more than the economic threshold levels and have advised farmers to take up pest control methods in the initial stages itself to prevent damage to the crop.

The teams consisting of entomologists and agriculture scientists from the Agriculture Research Station in Kalaburagi and officials from the Agriculture Department found in low-lying agriculture fields in Chittapur, Sedam, Chincholi taluks the menace of *Pytopthora*, a fungal disease, between the soil and plant zone, and a web-based pest which damaged flowers in red gram.

The teams visited all the seven taluks of the district between October 19 and 25 and have come out with their findings. The teams have in their findings said that the growth of red gram plant in Chittapur, Sedam, Chincholi and Kalaburagi taluks were somewhat stunted and was in the flowering and pod forming stage. The teams also found farmers taking up sowing of Bengal Gram in many places and the condition of the cotton crop in Jewargi taluk was normal. The sucking pest menace was noticed in some fields. However, the pink bollworm disease was not found in any of the cotton fields.

# BusinessLine

### Melghat's organic custard apples now in Mumbai



Organic fruits are no longer a monopoly of swanky malls and corporate chains. Tribal farmers from Melghat — one of the worst affected areas in Maharashtra due to malnutrition — have now ventured into selling and marketing their organic fruit produce, starting with Sitaphal (custard apple).

Utilising forest land obtained under Forest Rights Act, the tribals and villagers have embarked on a new journey, different from their conventional farming.

On Tuesday, Raju Dahikar, Sunil Dahikar, Ramlal Kale and Ravi Yeole, farmers from Melghat, parked their caravan near the old MLA hostel canteen only to greet an overwhelming response from Mumbaikars who crowded them to buy the organically harvested fruit, marketed under the name 'Naturals.'

Having already sold their produce in Wardha, Yavatmal, Akola, Sewagram, Paratwada and Nagpur in Vidarbha the group decided to hit Mumbai for a day.

The fruit was sold in quantities: 12 Sitaphal, weighing 2.5 kg; 16 sitafal weighing 3.5 kg; 20 sitafal, weighing 5 kg, and; 24 Sitafal, weighing 6 kg, at a price of Rs. 150 to Rs. 200 per box. In a span of four hours they managed to sell almost 40 boxes.

The project is a joint venture between Maharashtra government and an NGO named Khoj, which works to uplift the lives of marginalised and underprivileged tribals living in the area.

"Today, the State government is of view to allocate the forest land to corporates, but the villagers have the first right on the forest land. I asked the villagers to demand their right for the sake of their own betterment," Purnima Upadhyay of Khoj, said.

Mr. Yeole, one of the farmers, who also works as a secretary of Van Vyapasthapak Samiti, said producing and selling the fruit by themselves is different experience altogether for them. "We are learning tricks in this business and may not be as professional as others are. But this exercise has at least given us a confidence that we too can sell our product and compete with others," he said.

Another farmer, Mr. Dahikar, who runs a labour employment organisation, said he has been witnessing the hardship faced by labourers in the village. "Through this exercise we could manage to provide employment to some of those labourers. As we cut the chain of brokers, the entire profit will be utilised for the betterment of these workers and for further plantation," he said.

The writer is an intern with The Hindu



Crop devastation: After whitefly, brown plant hopper turns nemesis for Punjab's farmers



For Punjab's farmers, fortune always seems to smile on the other side. Last year, it was the whitefly sucking pest that ravaged their cotton crop. This time round, it's the brown plant hopper (BPH) that has caused significant yield and price realisation losses for paddy grown in large swathes of the state. And there couldn't have been a worse time for the BPH (kala tela, in local parlance) to strike — barely a week or ten days before a bumper crop was ready for harvesting.

### Read: A surgical strike that farmers in India's granary were least prepared for

In 2015, an estimated 1.36 lakh hectares (lh) out of the total 4.36 lh area sown to cotton in Punjab had suffered whitefly infestation. It led to farmers planting a mere 2.56 lh under the fibre crop this year. And ironically, the ones who did plant are celebrating today, as not only have there been no whitefly pest attacks, but even realisations are pretty good. Farmers have sold kapas (raw un-ginned cotton) of various Bt hybrids at Rs 4,800-5,300 per quintal this season, compared to last year's Rs 3,900-4,700 rate range.

Baldev Singh, a farmer from Panniwala Mahla village of Abohar tehsil in Fazilka district, regrets having drastically slashed his cotton area from 32 acres to 3 acres this year. "I did it after my crop in 8 acres was totally destroyed by whitefly. How on earth would I have known that there will be no pest attacks or prices are going to be better this time?" he points out. Harpreet Singh from Lakhmirwala in Mansa district's Budhlada tehsil, on the other hand, is elated. He did not reduce his 15 acres area planted to cotton. His yields have also been 8 quintals/acre, as against last year's average of 5 quintals.

State officials have been quick to take credit for no whitefly devastation this year. "We maintained close and constant vigil through 500 scouts and 50 field supervisors, who were appointed for the first time. Thanks to their regular alerts, we could save the crop in all the eight cotton-growing districts (Ferozepur, Fazilka, Faridkot, Muktsar, Moga, Barnala, Bathinda and Mansa) through timely pesticide sprays. This was even after whitefly incidence was detected initially in about 12,000 acres in Khuian Sarwar and Abohar blocks of Fazilka," informs Jasbir Singh Bains, director of agriculture, Punjab government.

No such "close and constant vigil" from the entire official machinery was, however, observed for in paddy. Farmers in Punjab expanded the area under paddy this year to 30.10 lh, from 29.75 lh in 2015. The increase came entirely from 'parmal' (non-basmati) varieties; basmati paddy acreage actually witnessed shrinkage from 7.63 lh to 4.96 lh.

But despite this switch to a crop supposedly less prone to pest attacks or price risks, large paddy-growing areas in the state have reported BPH infestation. The farmers have these cases have either suffered lower yields or resorted to premature harvesting in order to limit crop damage. Devinder Singh of Khabe Dogran village in Tarn Taran district was able to harvest only 23-24 quintals of paddy per acre, as against his normal average of 30-32 quintals. Moreover, the kala tela attack forced him to go for early harvesting and sell his grain at Rs 1,350 per quintal, below the government's minimum support price (MSP) of Rs 1,510 per quintal. "The arhtiyas (commission agents) in the mandi told me that the MSP is only for paddy with maximum moisture content of 17 per cent, whereas my grain had more than that limit," he complains.

Amarjit Singh, who has been the sarpanch of Chandke village in Gurdaspur's Batala teshil for the last 30 years, alleges that state procurement agencies have colluded with arhtiyas and rice millers/shellers to use high moisture content as a pretext to "loot farmers" this time. "I was paid between Rs 1,430 and Rs 1,450 per quintal. They imposed a cut of Rs 60-80 against the MSP in the name of moisture content," adds this farmer whose extended family owns 100 acres, of which he alone cultivates 40 acres.

In many parts of Punjab, farmers are said to be delivering paddy with moisture content going up to 22 per cent. Every one percentage point increase beyond the permitted 17 per cent moisture limit attracts a value cut of Rs 20/quintal. "Not more than 15 per cent farmers have received the full MSP of Rs 1,510 per quintal this year. 85 per cent would have had to face a minimum cut of Rs 20/quintal. The government should have granted a one-time moisture limit relaxation of 21 per cent, keeping in view the totally unanticipated BPH attack at the fag end of the season," states Ajmer Singh Lakhowal, chairman, Punjab Mandi Board Most farmers The Indian Express spoke to agreed that procurement operations this time have been smooth overall. "The government is aware that Assembly elections are due early next year and has ensured prompt lifting of our paddy in mandis. But they should have also kept strict vigil on the arhtiyas, sheller owners and government inspectors, who have taken advantage of kala tela to imposed arbitrary value cuts and deny farmers the MSP," asserts Himmat Singh of Kishangarh village in Jalandhar, who sold his 250 quintals of paddy at Rs 1,300/quintal "when I should have got at least Rs 1,400".

Jagmohan Singh Dakaunda, general secretary of a Bhartiya Kisan Union faction he himself heads, believes that the Punjab government should have taken up the issue of moisture relaxation with the Centre. "Farmers are not at fault here. The high moisture content is only a result of their being forced to harvest a bit early. Haryana farmers, too, have experienced the same problem from kala tela this time, but the government there has made sure that their entire crop is purchased with a value cut not exceeding Rs 10-20/quintal," he claims.

According to Gurdev Singh Deol, former head of the Punjab Agricultural University's department of entomology and now a consultant with the Tata Trust, high humidity levels during grain-filling stage are the most conducive to BPH pest infestation. "They attack the stem of the paddy plants and suck the juice from it, which affects grain formation as well. A good spell of rains during September about 2-3 weeks before harvesting is helpful in clearing the pest. This time, we have unfortunately had high humidity, but very little rains in September," he notes.

While kala tela has been a frequent visitor in the past decade, Bains admits that its incidence this year has been the highest since 2011-12. When farmers began to notice the sudden build-up, they panicked and prematurely harvested their crop even with high moisture content. In fact, both mandi arrivals of paddy as well as procurement by government agencies have so far been higher relative to last year's corresponding levels. It is a different matter, though, that bulk of this grain would have fetched farmers less than the official MSP. To what extent they would attach the blame for that on the ruling Shiromani Akali Dal-Bharatiya Janata Party alliance remains to be seen.

## Brown Plant Hopper: A surgical strike that farmers in India's granary were least prepared for



Hot and dry weather raises the chances of whitefly attacks, as Punjab's farmers discovered for cotton last year. This year, it is humid and warm conditions, particularly in September, that has put paid to their hopes of a bumper paddy harvest. The villain: an innocuous-looking insect called the brown plant hopper (BPH).

### Read | After whitefly, brown plant hopper turns nemesis for Punjab's farmers

Unlike most other pests, this one typically strikes very late, when the paddy crop is already 80-90 days old and in the final grain-filling stage. The female moths lay eggs from early-September that hatch within 10 days. The larvae emerging from them are the real baddies. These immature nymphs settle at the lower stem or culm of the paddy plant, from where they start sucking the sap. Since this sap rich in carbohydrates is transported through the phloem tissues to the grains that are still forming, it being sucked also impacts filling.

"The resultant grains tend to be ill-filled, light-weight and chaffy. While it may appear that the farmer has harvested 20-21 quintals of basmati paddy per acre, actual yields would be only 15-16 quintals. The farmer will also get a lower price because there would be a higher percentage of broken rice produced during milling," explains A K Singh, head of the Indian Agricultural Research Institute's (IARI) division of genetics.

The entire lifecycle of the BPH insect – from the laying of eggs to the larvae becoming adult moths – is just 25-30 days, of which the most dangerous nymphal stage lasts 15-20 days. "This time, the maximum nymphal population was noticed from September 25 at the grain-filling stage (when the milky starch material turns first into soft and then hard

dough) about a week or 10 days before harvest. The sultry and cloudy weather was clearly favourable to the buildup," notes Singh.

According to Sarjiwan Singh Manhas, research & development head of Syngenta South Asia, BPH infestation is often difficult to detect since the pest attacks the lower portions of the paddy stems. "We tell farmers to go for prophylactic insecticide spraying. It should be done when they notice even a few hoppers in neighbouring fields in the early stages of the crop. The usual practice, instead, is to spray when the build-up has already happened and the plant would have grown to some three feet height, at which the required quantum of the chemical may not reach the bottom parts where the insect is present," he points out. The Switzerland-based (now Chinese-owned) Syngenta's product 'Chess' — the active ingredient molecule is pymetrozine — is seen as the most effective against BPH today. "In our 200 demonstration plots and two learning centres attended by 10,000 farmers in Punjab and Haryana, we have shown that you can control the pest through timely and the right kind of spraying. The paddy grown in these sites did not suffer yield loss even this year when infestation levels were so high," claims Manhas.

<u>Pritam Singh</u> Hanjra, a progressive farmer from Urlana Khurd village in Haryana's Panipat district, does not dispute the effectiveness of 'Chess', but is concerned about the price. "It costs Rs 6,000 per kg and you need to spray 120 grams per acre. That works out to Rs 720, excluding the cost of spraying itself which is another Rs 200 per litre. Also, I don't know how long it will be effective. Earlier, we were using Applaud (buprofezin molecule of Dow Chemical), Actara (Syngenta's thiamethoxam) and Confidor (Bayer's imidacloprid), but the pest has developed resistance against all of these," he says.

Moreover, it isn't just BPH. Paddy farmers are also spraying against other pests such as stem borer and neck blast. "The most effective chemicals to control them now are Coragen (chlorantraniliprole) and Galileo (picoxystrobin) respectively, both belonging to DuPont. These again cost between Rs 700 to Rs 800 per acre each. As farmers, we have no choice but do everything to protect our crop," complains Hanjra.

An alternative approach to spraying, which the IARI is presently working at, is to breed for resistance through introduction of genes sourced from both traditional landrace cultivars as well as wild relatives of paddy.

The country's premier publicly-funded farm research institute has transferred the 'Pi9' gene obtained from Oryza minuta (a wild relative of normal cultivated rice, which is Oryza sativa) to its popular Pusa Basmati-1 variety, in order to make the latter "moderately resistant" to neck blast and "highly resistant" to leaf blast fungus. Likewise, two genes — 'Xa21' from Oryza longistaminata (another wild relative) and 'xa13' from BJ1 (a traditional landrace) — have been incorporated into Pusa Basmati-1 to confer resistance to the deadly bacterial blight pathogen.

For BPH control, too, IARI is looking at transferring the 'Bph 17' gene sourced from Rathu Heenati (a traditional Sri Lankan red rice cultivar) and the 'Bph 18' gene from Oryza australiensis (a wild relative) into its improved Pusa-1121 and Pusa Basmati-6 varieties.

"In all these cases, the transfer of the target genes from the resistant donor lines has been achieved through molecular breeding based on marker-assisted selection. We did this first

in basmati varieties, because there is a huge export market for this rice and farmers cannot risk too much application of pesticides. Through molecular breeding, we are ensuring that only the particular genes of interest get introduced without compromising on the unique basmati grain traits," informs A K Singh.

# As prices soar days before Diwali: Maharashta government to sell chana daal at retail shops in Pune

With the price of chana daal surging, the Maharashtra government has decided to open retail selling centres in Pune, Amravati, Mumbai and Nagpur to provide some relief to consumers. The state government is going to sell around 500 tonnes of daal from these centers, said Mahesh Pathak, principal secretary of food and civil supplies department.

When the state had witnessed a similar crisis over tur daal, the government had implemented a scheme to sell it from retail centres at a subsidised rate.

The price of chana daal spiked after low acreage and heavy rain took a toll on the production of chana this year. An integral part of festive savouries and sweets, the price of chana daal rose to Rs 150 -160 per kg in retail markets in Pune and Mumbai.

To check the rising prices, the state government had asked for nearly 700 tonnes of chana from the central government which, when milled, would yield 500 tonnes of daal.

Pradeep Ghorpade, chief executive officer of India Pulses and Grains Association (IPGA), said that over the last three years, chana has sold below the Minimum Support Price, which led to migration of chana acreage to other crops. "Owing to the acreage migration to other crops and heavy rain, the output of chana crop has dropped sharply from 9.60 MT in 2013-14 to 7.33 MT in 2015-16," he said.

Beyond the bad weather, another reason for the steep hike in price is delayed imports from Australia and other countries, said Ghorpade. "As the harvest season in India is around January, and in Russia it's around December, there is hardly any supply of chana in the market... this has caused the price of chana to spike. The shortage of daal is only temporary and the price is likely to ease up by mid to end November as the first of the imports arrive in India," he said.

Meanwhile, the steep price hike at the beginning of the festive season has come as a shock to consumers. Shalini Mohite, a homemaker from Rasta Peth, said she had to pay extra for besan, an alternative for chana. "I am scared that the besan might be adulterated so I do not know whether to use it," she said.

## **Business Standard**

### Good rains should help improve rural demand'

Hindustan Unilever (HUL) reported a decline in volume growth for the September quarter after seven years. In an interaction with media, managing director & chief executive Sanjiv Mehta spelt out his priorities. Edited excerpts:

Clearly, the focus on volume growth has not yielded results for HUL, as the demand environment remains challenged and the commodity inflation is setting in.

This quarter was challenging because we increased prices in personal wash (soaps). But, that does not mean we will take our eyes off volume growth. In an inflationary environment, price hikes in a sense is inevitable. But, pricing action only happens after taking into account all factors. Commodity deflation is behind us and we have to face market realities. But, the outlook for us remains positive with a good monsoon in rural and improved consumer sentiment in general. In the mid to long term, this should have a positive rub-off on the business.

What is your sense of the fast-moving consumer goods market? How fast do you think it can get back to the growth path, given that there is a consensus the second half will be better than the first half this year?

The virtuous cycle will set in. Our business works when there is money in the hands of more people. The signs suggest that it will kick in after two successive droughts because of the good rain that happened this year. While monsoons have to be consistent and one year's rain might not be enough, there are other triggers, too, such as the government's rural and overall infrastructure push. That should help in improving the demand environment in rural areas.

Apart from personal care, foods was also weak this quarter. Will you get out of branded commodities altogether and focus on processed foods alone where Knorr and Kissan have been doing well?

Our Annapurna salt business did get impacted because of rains in the September quarter. While Kissan and Knorr are doing well, we will not get out of the Annapurna business. We will look at how we can get into the value-added game with Annapurna. That will be the focus for us.:

### Agrochem firms on recovery path



Following a normal monsoon after two years of drought, big agro chemical companies that have declared quarterly results so far — PI Industries, Rallis and Bayer CropScience — have shown improvement in revenue and profit.

September is an important quarter for these companies, as demand is based on monsoon projections and progress. Will the growth continue?

Anuj Sethi, senior director, CRISIL Ratings, said: "Recovery in revenue growth will be gradual, with domesticdemand outpacing exports. Further, softer input prices are expected to lead to steady operating profitability and better cash flows. In the absence of significant capital spending, credit metrics for agro chemical makers are expected to improve over the medium term, but working capital challenges would continue. Easier credit terms to support domestic offtake, and the inherent long credit cycles abroad, particularly Latin America, will counterpoise the benefits of inventory pruning."

### MONSOON KINDLES HOPE

Quarter ended (₹ cr)	Net sales	Y-o-Y in %	Net profit	Y-o-Y in %
BAYER CROPSCI	ENCE			
Sep '15	989.4	-18.6	155.8	-11.5
Dec '15	622.2	-9.5	27.4	-50.2
Mar '16	500.8	-7.4	16.5	-62.0
Jun '16	799.2	8.4	131.2	18.6
Sep '16	1,080.7	9.2	159.1	2.1
RALLIS INDIA				
Sep '15	447.3	-29.7	50.8	-30.8
Dec '15	306.2	-20.4	20.4	-19.9
Mar '16	342.0	8.6	32.3	51.3
Jun '16	444.9	7.2	174.2	310.9
Sep '16	540.3	20.8	66.5	31.0
PI INDUSTRIES				
Sep '15	444.1	4.5	57.0	16.3
Dec '15	506.3	0.8	72.5	16.6
Mar '16	574.0	6.5	94.3	56.3
Jun '16	631.7	14.5	126.9	47.7
Sep '16	536.9	20.9	101.4	78.0
Sep '16	536.9	20.9	101.4	1

Compiled by Bs Research Bureau

Source: Capitaline

For Raliis, Bayer and P I, these results were the best since the earlier five, shows data compiled by BS Research. CRISILhas said: "High channel inventory and tepid global recovery will constrain a rapid rebound in near-term revenue growth, and high receivables would spawn working capital challenges."

Rabi demand would be crucial for the domestic market. With kharif sowing improving and minimum support prices increasing, domestic demand growth for agro chemicals will swing back to double digits after two years. However, according to CRISIL's analysis. "Overall revenuegrowth will be stuck in the five to seven per cent range this fiscal, only marginally higher than the past two years, with inventory pile-up in the domestic and global markets, global demand and muted soft realisations."

Inventories had risen sharply in the past two years, a lot of it piped to distribution channels. As a result, the current financial year started with a glut, which dampened revenue growth prospects at a time when demand is set to strengthen. "Many distributors purchased agro chemicals but agricultural prospects were badly hit due to unseasonal rain and hailstorm last year, resulting in pipeline inventories," said an industry executive. Demand growth is expected to remain low abroad, particularly in America and Europe. The Asia-Pacific and Latin America are recovering faster. Exports, 40-45 per cent of sales of major domestic agro chemical makers, face not only a demandchallenge but currency volatility. Lower demand growth abroad is resulting in consolidation in major agro chemical and seed companies. In the past 12 months, four major merger deals were announced, all involving big names in the segment.

Consequently, "we see revenue growth reverting to the historic levels of 13-14 per cent only over the medium to long term, subject to a normal monsoon and steady demand recovery abroad", said CRISIL. It believes India will continue to see more of licensing collaborations and distribution tie-ups, with an occasional inbound

acquisition. Outbound transactions are likely to remain modest in size, mainly for registrations and market access.

CRISIL Ratings' credit ratio (upgrades to downgrades) has increased above one, meaning upgrades outnumber downgrades for its portfolio of 33 agro chemical companies, in the first half of this financial year.

Manish Mahawa of Religare Institutional Research is not so bullish on investing in these companies. He said: "Our interactions with agro chemical dealers and players indicate rainfall was normal across India barring the southern region but agrochem demand has been below par". The industry is likely to grow 12-15 per cent in the September quarter over a year before versus the 18-20 per cent earlier anticipated, he adds.

However, adequate reservoir and soil moisture content levels bode well for the coming rabi season. So, "we expect downgrades to FY17 earnings, even as rich valuations leave limited upside in agrochem stocks".