

Sorghum price to remain stable: TNAU

COIMBATORE, December 6, 2013

The Agro Marketing Intelligence and Business Promotion Centre (AMI and BPC) of Tamil Nadu Agricultural University has said that price of sorghum has limited chance to increase till February 2014.

Hence, it has asked farmers to sell it upon harvest.

The price has been forecast based on a 10-year analysis made at the Tirupur Regulated market.

Price

The present price is Rs. 18.50 a kg.

The price forecast for November-December is around Rs. 19.

Last year the price during harvest was around Rs. 16.50.

In Tamil Nadu, sorghum is grown in kharif (July-November), rabi (October-February) as well as summer (January-April) seasons, a release here has said.

The area under grain sorghum is gradually decreasing because of less demand for it as a food grain.

Maize

It is being replaced by maize in many districts, which gives higher returns due to better market price. In many areas sorghum is raised as a fodder crop.

Details

For details, contact 0422-2431405 / 2450507, the release added.

- Sell it upon harvest
- Acreage decreasing

TNAU adopts village



In what is said to be a firstof-its-kind, Tamil Nadu Agricultural University (TNAU) has adopted a village to disseminate the latest technologies in horticulture.

Horticultural College and Research Institute of TNAU has adopted

Sattakkal Pudur in Kinathukadavu Block for a year to not only make farmers there aware of the latest technologies but also demonstrate these in their fields.

At the end of the year, the village is expected to turn into a model for farmers from other villages to emulate.

Since the village was growing horticultural crops, mainly coconut, tomato, chilli, brinjal and bindi, the institute decided to impart technologies available in horticulture.

According to T. Saraswathi, Head, Department of Vegetable Crops, the village was chosen after farmers were convinced about the concept, which was novel to them. "The idea is to deliver all technologies in the best possible forms possible. This will include, orientation sessions, training, field demonstrations and also implementing the technologies in the farms of two or three farmers during the normal crop cycle so as to show the benefits to other farmers," she said.

The first orientation was held recently, where a team of faculty, belonging to the different departments that come under the Institute, briefed the farmers about the various activities the university had planned for the year.

Concept

S. Mariappan, Dean in-charge, Horticultural College and Research Institute, explained the concept to the farmers, while the other faculty experts highlighted the various technologies.

A formal inauguration of the model village project would be made by K. Ramasamy, Vice-Chancellor of TNAU on December 21.

Following this, regular training would be conducted for the farmers so that they are equipped to adopt a few technologies for the Thai pattam sowing in January 2014.

Experts in the university would choose a few farms of farmers to implement the technologies from sowing to harvesting, starting January next.

They would visit the village frequently for providing guidance and also support the farmers in supply of seeds and other needed infrastructure.

'Vivasaya Thiruvizha' on in agri college

Principal Secy (Agriculture) calls on farmers to increase production

Sandeep Saxena (second from right), Principal Secretary (Agriculture), at a stall put up at 'Vivasaya Thiruvizha' at Agricultural College and Research Institute near the city on Thursday.— Photo: G. Moorthy

A three-day "Vivasaya Thiruvizha" (agricultural festival) was inaugurated at the Agricultural College and Research Institute near here with the initiative of the Confederation of Indian Industry (Madurai Chapter).

Speaking on the occasion, State Principal Secretary (Agriculture) Sandeep Saxena stressed the need for adapting modern technology and techniques by the farmers. By doing so, the farmers could reap huge profits and the productivity would go high, he said.

At a time when getting skilled farm labourers was a big challenge, it was imminent to get used to the latest technology, Mr.Saxena said, adding Chief Minister Jayalalithaa had unveiled a vision plan, which would take the State to the top slot in agriculture sector. Six per cent of the State's population relied on agriculture. With three per cent of the total water resources available to irrigate about four per cent of the cultivable land, the farmers had to produce different crops.

Hence, the farmers needed guidance before and after harvest to avoid wastage of water in any form. The farmers would also be sensitised to the importance of value addition, he noted.

In his address, Horticulture Commissioner Satyabrata Sahoo said 50 per cent of the horticultural crops harvested in the State came from the southern districts. Tamil Nadu ranked among the top three States in the country in producing crops such as banana. The government would intervene to step up the crop production, he asserted.

Inaugurating the festival, Mayor V. V. Rajan Chellappa said the government was determined to improve the standard of living of all classes. Events like 'Uzhavar Thirunaal' organised for the farmers would play a significant role in the growth of agricultural sector, he said.

Agricultural College Dean Chinnasamy and CII national task force member Thyagarajan also spoke.

Earlier, CII (Madurai Chapter) chairman Kathir Kamanathan welcomed. Vicechairperson Dr.Rohini Sridhar proposed a vote of thanks. About 70 stalls displaying farm equipment, implements and accessories and innovations have been put up, and workshops are organised for farmers.

Good response to BARC stall at agri expo



"I always associated Anu Araichi (atomic research) with production of bombs. I never knew that it is also used to produce crop varieties and process food

BARC scientists explaining crop varieties to farmers in thecity on Thursday.— Photo: G. Moorthy

products,"is how P. Kunjulumuthu, a farmer from Karuttupatti near Bodinayakanur in Theni district expressed his surprise on seeing a stall put up by Bhabha Atomic Research Centre (BARC) at an agri expo in the city on Thursday. Concurring with him, P. Veerayan, another farmer, said that he was impressed with the seeds produced through mutation breeding - a process of exposing seeds to radiation— by BARC scientists at Trombay.

"The information provided to me at the BARC stall, opened my eyes to new kinds of varieties. They also told me that mutant seeds are completely safe. I would certainly like to try them on my land," he said.

J. Daniel Chellappa, senior scientist, Technical Coordination Wing, BARC, said that the response from the farmers had been phenomenal though it was the first time that his organisation had put up a stall in an agri expo here. "We are not going to leave it at this. We have taken the address and phone number of every visitor to our stall and we shall follow it up with them," he added.

He also said that BARC was ready to demonstrate the superiority of its crop varieties as against others if any non-governmental organisation involved in agriculture or a private agri enterprise came forward to organise such a public demonstration. Named Trombay crop varieties, the seeds had been notified in the gazette for commercial cultivation by the Union Ministry of Agriculture.

J. Subramanian, scientific officer, BARC, said that this organisation had a total of 41 Trombay Mutant Varieties on offer. There were 15 groundnut varieties, two soybean, one cowpea, one jute, three mustard, four pigeon pea, one rice, one sunflower and so on. "Our seeds contain improved characters such as higher yield, earliness, larger seeds and resistance to biotic and abiotic stress," he said.

'I never knew atomic research is also used to produce crop varieties'

Don't take up cropping in dry-out period, shrimp farmers advised

The Fisheries University has advised shrimp farmers not to take up cropping during the dry-out period starting December. With the completion of harvest by prawn farms engaged in the cultivation of *L. Vannamei* species, the university has issued the advisory for shrimp farms in the district.

The advisory calls for better pond bottom management, water management, disease prevention, and bio-security measures from shrimp cultivators during the dry-out period between December and February.

Farms have been advised to desist from taking up intermittent crop during the dry period due to inclement weather conditions. The water temperature may be inimical to a healthy crop leading to spread of diseases from one pond to another.

Instead, ponds must be left dry and fallow with the bottom soil dredged up to two inches to get the ponds ready for the forthcoming crop in February. Farmers are advised to take up stocking only by late January.

The pipes pumping water into the ponds must have 40-60 micron filters. Before water is filled in the ponds, bio-security measures such as crab nets and bird nets must be installed around the ponds. The water, after being pumped into the ponds, should be bleached to a composition of 60 parts per million. The *L. Vannamei* seeds shall be well tested for white-spot virus before being stocked in the ponds. Stocking density of the seeds should be about 20-40 per sq. metres. Higher stocking density might cause problems in judicious pond management, sources said. Farmers must ensure weekly testing of waters, pond and soil nutrients, and good bacteria based on the advise of pond technicians. Farmers

are advised to ensure measured feed based on measurement trays and refrain from dumping excessive nutrients.

Lack of rains takes a toll on sugar production

Only 1.24 lakh quintal expected this year as against 2.14 lakh quintal produced last year

Lack of rain this year has taken a toll on sugar production with the National Cooperative Sugar Mill (NCSM) at P. Mettupatti near Alanganallur here aiming at a production of just 1.24 lakh quintals this year as against the 2.15 lakh quintals produced during the last season.

Officials expect to crush around 1.3 lakh metric tonnes of sugarcane. During the last season, 2.25 lakh metric tonnes of sugarcane were crushed between December 1, 2012 and May 3, 2013.

Special representative for the Government of Tamil Nadu in New Delhi S.T.K. Jaggaiyan, Collector L. Subramanian and MLAs R. Samy, K. Tamilarasan, M.V. Karuppiah and M. Muthuramalingam were present during the commencement of the crushing season on Thursday.

Crushing started with the symbolic blow of a siren and the operation of a conveyor that pushed the canes into the crusher.

T. Alagarsamy, secretary, Southern Sugarcane Farmers Uplift Association, said crushing had begun without the State announcing the procurement price this year. "We expect it to be fixed somewhere around Rs.3,500 a tonne," he said.

Association president K. Abbas said their expectation was very genuine, especially in view of the steep increase in input costs and shortfall in production.

"At present, it costs us about Rs.40,000 for growing cane on an acre. The cane cutting charges had also gone up to Rs.700 per acre," he noted.

M. Sembukutty, Managing Director, NCSM, said as of now the sugarcane growers would be paid Rs.2,339.50 per tonne – the amount fixed during the last season. They would be given the differential amount as and when the government announced the revised price for this season, he added.

'Fruits of research not reaching farmers'

With 60 per cent of field functionaries missing from the State's agricultural extension programme, the fruits of research and technology development have not been reaching farmers, Vice-Chancellor of the University of Agricultural Sciences (UAS), Bangalore, K. Narayana Gowda said on Tuesday.

The State's 747 Raitha Samparka Kendras established in each hobli were supposed to include trained farm extension staff who guide farmers on best practices and help with technology transfer; but 60 per cent of these posts were vacant, he said.

"And wherever these functionaries exist, they are not adequately competent on key technical areas such as plant protection."While there was a shortfall in extension staff, many trained people were unwilling to work in villages, Dr. Gowda said.

"Information communication technology (ICT) could be an option to fill this gap and to communicate information, especially on skill-based technology," he said. A four-day international conference on 'Extension educational strategies for sustainable agricultural development', to be held on the UAS-B campus from Thursday, would identify strategies to fill gaps in extension work. Eminent agricultural scientist M.S. Swaminathan would be the chief guest at the inauguration.

Natural resource management, scope and limitations of ICT and women as future farmers are some of the themes that would be discussed at the conference to be attended by around 300 delegates.

International conference on extension educational strategies from tomorrow

Farmers trained in giving mixed salt to milch animals

PUDUKOTTAI:

A day-long training on enhancing milk production was held at Mazhavarayanpatti village near here on Thursday under the auspices of Krishi Vigyan Kendra, Vamban. A large number of farmers and livestock owners participated and had their doubts clarified.

M. Asokan, Professor and Head of the Kendra, inaugurating the training, underlined the importance of mixed salt in increasing milk yield. He said that deficiency in feed was the main factor leading to fall in yield. Acute shortage of mineral salt was the main cause of the problem. The problem prevailed in several parts of the district.

The Tamil Nadu University for Veterinary and Animal Sciences had introduced district-specific mixed salt. For Pudukottai, farmers and livestock owners should utilise "category 4" of the mixed salt which was rich in calcium, phosphorous, magnesium, iron, iodine, copper, and manganese. He said the salt would ensure proper weight of the animals and increase the yield in milk.

V. Krishnamurthy, assistant professor of the kendra, said that the quality and density of milk would improve through the mixed salt. Another advantage of the 'category 4' salt was that it paved the way for healthy calves.

Dry tanks compel farmers to rely on water from dams

Poor monsoon deflates farmers' hopes for the fifth successive year

Fingers crossed:Farm workers transplanting paddy saplings in a field in Manimoortheeswaram near Tirunelveli.— Photo: A. SHAIKMOHIDEEN

Though almost all rain-fed irrigation tanks in the district are still dry as the northeast monsoon has let the farmers down once again, agriculturists have started 'pisanam' paddy season operations with the hope of meeting their irrigation requirements with the water stored in the major reservoirs.

After reaping the benefits of previous 'kar' paddy season, thanks to the decent precipitation at least in the catchment areas of Papanasam and Manimuthar dams during the southwest monsoon, the farmers have geared up for the 'pisanam' paddy season, the second crop of the calendar year.

Deficit rainfall

However, the district has experienced only deficit rainfall in the plains.

The precipitation in the catchment areas has kept the farmers' hopes of getting a profitable second crop season alive.

Though the water level in Papanasam dam, one of the three major reservoirs in the district, crossed the 100-feet mark on Thursday against its full capacity of 143 feet and in Manimuthar stood at 73 feet, the farmers are worried about the dry irrigation tanks due to scanty rainfall in the plains during the north-east monsoon.

If the monsoon had brought sufficient rainfall, the 1,528 rain-fed tanks in the district would have got decent storage and the agriculturists, after utilising the water available in the irrigation tanks for preliminary works, could have used the dam water for the second half of the season.

But now they have been forced to entirely rely upon the water available in the dams for irrigating the standing paddy crop till the end of the season in March.

"But, the elusive monsoon has negated our expectations for the fifth successive year.If this situation continues, we can never stop the conversion of farm lands into housing plots," said S. Ganesan, a farmer from Kurichi in Palayamkottai.

Officials worried

The Public Works Department officials are worried about the storage level in April or May next year as they will have to wet the infiltration wells sunk in the Tamirabharani with the water available in the dams.

"If the current paddy season consumed a major quantity of stored water and there is no rainfall in the catchment areas, the next summer will be the worst for us," a PWD official said.

Women's agri meet tomorrow

BANGALORE :

The Indian Institute of Horticultural Research (IIHR), Hessarghatta, is hosting a two-day "Rashtriya Krishi Mahila Mahotsav" at the Lalbagh Botanical Gardens from December 7. The workshop aims to provide information to women agriculturists on women-friendly farm technologies and offer a host of information about agriculture. The event is open to public, Mr. Sidhu said.

Farmers to begin cane crushing

KOLHAPUR:

Farmer members and workers in Tasgaon-Palus co-operative sugar mill in Sangli district have decided to start cane crushing by collecting fund for the cost. Farmers have resorted to agitation against the mill's auction by the Maharashtra state co-operative bank (MSCB) to get its dues and the fact that consequently the mill will be taken over by vested interests.

As the MSCB has issued auction tender of a long period, the crushing should be started in the farmers' interest and hence in a meeting of farmers and mill workers held on Wednesday it was decided to collect the fund of Rs. 5 crore and start crushing. A committee under PWP leader professor N.D. Patil as its chief has been formed for the purpose and a fund of Rs. 2 crore was collected on the spot.

COOLIE CRUSHED

UNDER TRUCK

Hingarappa Pujari (55), a coolie, was crushed under a truck on Wednesday on the premise of Warana co-operative sugar mill in Kolhapur district. The police said Pujari was asleep when a truck in the mill's go down reversed and crushed him to death.

WOMAN ARRESTED

FOR THEFT

A woman from Madhya Pradesh Mangani Chamar (55) was arrested on Wednesday on the charge of theft of cash and golden ornaments from marriage celebration halls in two areas in Kolhapur city. The police said, the woman stole Rs. 67,000 and golden ornaments during the celebration and disappeared. She has been remanded to police custody for three days.

Cattle markets to be closed down

PALAKKAD:

All cattle trade markets in the district will be closed down in view of over 3,000 cattle deaths due to foot-and-mouth disease (FMD) in the district so far.

This was decided at a meeting of officials convened by District Collector K. Ramachandran here on Thursday.

The government had banned bringing cattle from neighbouring States through the inter-State check-post. The meeting decided to organise awareness campaigns against the spread of the disease in municipalities and grama panchayats.

The Collector said farmers who had lost their animals to the disease would get Rs.20,000 per animal.

The officials of the Animal Husbandry, Sales Tax, and Excise Departments, would conduct checks with the assistance of the police and regional transport authorities to prevent the entry of animals through check-posts.

The public grazing of cattle had also been banned, Mr. Ramachandran said.

A recent meeting of the District Development Council (DDC) had asked the government to take steps to control the spread of the disease.

The meeting said 13,000 animals had been affected.

A large number of deaths had been reported from the eastern parts of the Chittur taluk bordering Tamil Nadu. The loss on this account would be around Rs.50 crore in the district, K. Achuthan, C.P. Mohammed, V. Chenthamarakshan, and M. Chandran, MLAs, told the meeting. Milk production in the district had come down by over 12 per cent due to the disease, they said.

They sought steps to prevent the inflow of cattle through the inter-State checkposts. Karnataka and Tamil Nadu had banned cattle trade markets, they added.

- Ban on bringing cattle from other States
- Farmers to get compensation: Collector

Root extract an 'antidote' to viper venom

Scientists from the University of Kerala and the Kerala State Biodiversity Board (KSBB) have come up with evidence that the root extract of a plant endemic to

the Western Ghats and the evergreen forests in the Indian subcontinent is effective against the venom of the Russell's viper.



The study, published in the latest edition of the*Journal of Ethnopharmacology* brought out by Elsevier, provides scientific validation of folk medicine practised by tribal healers. The extract of *Ophiorrhiza mungos,* commonly known as Keeri pacha or Keeri

purandan in Malayalam,

was found to neutralize the venom of the Russell's viper (*Daboia russelii*). A potent haemotoxin, the viper venom acts on the circulatory system, bringing about coagulation of the blood and clotting of the pulmonary arteries in bite victims. It can cause death unless a remedy is speedily applied.

Insensate model tested

The study found that the root extract of *O. mungos* had compounds with the power to neutralise the viper venom and inhibit its activity. The research team, including Anaswara Krishnan S. from the Department of Zoology, Dileepkumar R. from the Centre for Venom Informatics, Achuthsankar S. Nair from the Department of Computational Biology and Bioinformatics under the university, and Oommen V. Oommen, Chairman, KSBB, used early-developing chick embryos as an insensate model to test the efficacy of the anti-venom. The plant root extract was found to abolish traces of haemorrhagic lesions induced by the viper venom in the chick embryos.

As many as 2 lakh snake-bite incidents are reported in India every year, of which 35,000 to 50,000 prove fatal. The Russell's viper is the most common cause of fatal snake bite in southern India. The conventional clinical approach is the administration of polyvalent anti-snake venom prepared from the sera of horses or sheep. However, the poly specific anti-venom does not provide adequate protection against venom-induced haemorrhages, necrosis (tissue damage) and nephrotoxicity (kidney damage), and often produces serum reaction in some patients.

In addition, anti-serum development in animals is highly expensive and time consuming, and requires ideal storage conditions. Considering these limitations, scientists have turned their attention to systematic investigation of plant-based tribal remedies for snakebite, the paper says.

Traditional cure

"We found that tribal communities in south India had been using the roots of *O*. *mungos* to treat snakebite victims. There are several references to the plant in folk medicine literature. Our study is the first of its kind to examine the potential of the plant to act as an antidote to neutralise viper venom," says Mr. Dileepkumar. The team used a plant specimen collected from the Kallar region for the study.

The researchers estimate that the bioactive compounds in the herbal extract had the capacity to bind with various toxic components in the venom, neutralising its effect. Mr. Dileepkumar says the use of the shell-less egg culture as an insensate model is significant in the preliminary stages of venom research as it reduces the pain and suffering of higher mammals used in experiments. "However, animal experiments and human clinical trials will have to be used in the subsequent stages."

Uproar in U.P. Council over sugarcane farmers' plight

LUCKNOW:

The winter session of the Uttar Pradesh Legislative Council on Thursday started on a stormy note with the Opposition creating uproar over problems of cane farmers, leading to adjournment of the House for the day.

As soon as the House met for the day, members of the main Opposition BSP trooped into the Well on the plight of cane farmers and law and order issues.

The BJP and RLD raised the issue of hike in cane price, while Congress voiced concern over non-implementation of food security scheme in the State. As repeated requests by Chairman Ganesh Shanker Pandey for order did not yield results, he adjourned the House. Meanwhile the BJP Kisan Morcha staged a demonstrated in front of the Cane Commissioner's office to demand payment of arrears among other issues related to sugarcane growers.

Addressing the dharna Mr. Bajpai alleged that the situation was such that farmers were forced to commit suicide. –PTI

Sugarcane harvester form John Deere

NEW DELHI:

U.S.-based farm equipment major John Deere, on Thursday, launched a sugarcane harvester, which had been specifically designed for the domestic market. The new harvester, CH330, would be priced at around Rs.1.40 crore, and the company aimed to sell up to 20 units in the next year. "There is a huge market for cane harvester in India. Demand for such machines is expected to grow with

the rising cost of labour. We expect sales to improve in the coming years," John Deer India Managing Director and CEO Satish Nadiger said.

This is the second global company after New Holland to launch cane harvesters in India, the second biggest sugarcane producer in the world.

Water level

Mettur :

The water level in Mettur dam stood at 84.5 feet on Thursday against its full reservoir level of 120 feet. The inflow was 3,686 cusecs and the discharge 3,014 cusecs.

Water level in the Papanasam dam on Thursday stood at 100 feet (maximum level is 143 feet). The dam had an inflow of 1,168.45 cusecs following 4 mm rainfall and no water is discharged from the dam. The level of Manimuthar dam stood at 73 feet (118 feet). The dam had an inflow of 366 cusecs following 5.20 mm rainfall and no water is discharged.

Kanyakumari :

The water level in Pechipparai dam stood at 27.50 feet, 60.75 feet in Perunchani, 12.86 feet in Chittar I, 12.95 feet in Chittar II, 4.60 feet in Poigai dam and 51.26 feet in Mamabazhathuraiyaru.

Weather



INSAT PICTURE AT 14.00 hrs. Observations recorded at 8.30 a.m. on December 05th.

	Max	Min	RTR
New Delhi (Plm)	26	10	0 53
New Delhi (Sfd)	26	10	0 73
Chandigarh	25	8	0 43
Hissar	26	7	0 10
Bhuntar	21	1	0 26
Shimla	16	8	0 80
Jammu	25	7	0 140
Srinagar	15	-3	0 23
Amritsar	24	7	0 100
Patiala	25	10	0 11
Jaipur	29	10	05
Udaipur	27	11	0 55
Allahabad	28	10	0 301
Lucknow	27	7	0 42
Varanasi	28	11	0 141
Dehradun	24	8	0 48
Agartala	31	15	0 190
Ahmedabad	32	18	0 63
Bangalore	27	16	0 244

Bhubaneshwar	28	15	0 674
Bhopal	28	12	0 26
Chennai	30	23	0 427
Guwahati	29	14	0 215
Hyderabad	30	17	0 253
Kolkata	28	17	0 530
Mumbai	32	25	0 73
Nagpur	31	15	0 169
Patna	27	11	0 194
Pune	29	17	0 43
Thiruvananthapuram	31	23	0 466
Imphal	27	8	0 69
Shillong	18	9	0 77

The columns show maximum and minimum temperature in Celsius, rainfall during last 24 hours (tr-trace) and total rainfall in mm since 1st October.

MAINLY DRY WEATHER

Rainfall: Weather was dry over the region.

MINIMUM TEMPERTURE: The minimum temperatures changed little over the region. They were above normal in Rajasthan and normal in rest of the region. The lowest minimum temperature in the plains was 04.3°C recorded at Adampur (Punjab).

FORECAST FOR REGION VALID UNTIL THE MORNING OF o8th DECEMBER 2013:Light rain/snow could occur at one or two places over Jammu and Kashmir. Weather would be mainly dry over rest of the region. No significant change in the minimum temperature over the region. Shallow fog may occur over isolated pockets of Punjab, Haryana, Delhi and east Uttar Pradesh in the morning hours. **FORECAST FOR DELHI AND NEIGHBOURHOOD VALID UNTIL THE MORNING OF 08th DECEMBER 2013:** Clear sky. Mist in the morning.

THE TIMES OF INDIA

Farmers' leaders oppose draft details of sugarcane Act

KOLHAPUR: The state government on Wednesday evening rushed to clear the draft of the Maharashtra Sugarcane (Purchase and Supply) Act, which was recommended in the Rangrajan Committee's report on reforms in the sugar sector. It was the state's attempt to show that it is toeing the line of the committee. However, farmers' leaders have not welcomed the draft details of the Act.

The proposed Act would be on the lines of the Karnataka Sugarcane (Regulation of Purchase and Supply) Act, 2013. This was decided in Wednesday's meeting between the state government and representatives of cooperative sugar factories.

The Karnataka government has proposed establishment of a <u>Sugarcane Control</u> <u>Board</u>, which will have ministers, bureaucrats, cane growers and factory owners, among others, as board members. The new law states that it would be binding on a sugar factory to pay the cane price within 14 days to the growers and the payment would be made on the basis of the recorded weight of the sugarcane at the factory. The Karnataka Act also envisages rigorous imprisonment for a year or a fine if any person contravenes any provision. The state government has, however, dropped this clause.

A senior bureaucrat said, on the condition of anonymity, "So far, two of the 10 recommendations made by the Rangarajan Committee on sugar decontrol have

been accepted, as sugar barons have been pressurizing the government to not accept all the recommendations. It includes removal of the sugar levy limitation and 70% of the revenue earned by an individual sugar factory (producing only sugar) being distributed among cane growers. The Act also states that 75% of the revenue would be shared by an individual factory earning from sugar and sugarcane by-products, with cane growers.

The state has studied Karnataka's Act and then formed its own." The Act also mentions that the sugarcane purchase price can be decided as per each factory's financial condition and expenses. Some factories use old machinery, wherein the production cost is higher than that of factories that use modern machinery. In some cases, the cost of transportation is also higher.

Leaders of cane growers object to this clause stating that it would mean factories could inflate their production cost figures and claim to pay lower rates to farmers.

Senior leader of the Swabhimani Shetkari Sanghatna (SSS) Sada Khot said, "All the sugar factories join hands when they want to sell sugar. But the same rule does not apply to farmers when sugar factories want to buy sugarcane from them.

The SSS has been demanding an average price for sugarcane, which will cover the input cost of farmers for cane cultivation. This is nothing but the state's double standards.

Such an Act will not benefit sugarcane cultivators."

Raghunath Patil, who heads a faction of the SSS in Sangli district, said, "The factories are earning well from sale of by-products such as ethanol, sugar molasses, potable spirit and rectified spirit, among other things.

The contribution of by-products in a sugar factory's overall earnings is much higher than earnings from sugar alone. But sugar factories do not disclose their earnings from by-products and they will continue to hide the amount. There is no provision in the Act that would look into the matter."

Former managing director of a sugar factory and consultant P G Medhe said, "The Act is based on the Karnataka government's guidelines and sugar board, but factories from that state have gone to the SC as the board's recommendations are impracticalNobody eats more than 2kg of sugar in a month in the country, but maximum consumption is by confectionaries and soft drink makers. The Union government should also form import-export policies, which will not affect the economics of sugar factories."

The act is welcoming but state and union government should also form its policies which will support the sugar sectors, he added.

Business Line

Slack N. Indian enquiries grinds turmeric

Erode



Spot turmeric prices at Erode declined on Thursday as there was no demand from upcountry buyers..

"The arrival has increased to 5,300 bags, but the sales were very poor with 40-45 per cent, as there was no heavy demand

from upcountry traders. Only one or two orders were received by some turmeric exporters. Spot turmeric prices at Erode declined on Thursday as there was no demand from upcountry buyers..

"The arrival has increased to 5,300 bags, but the sales were very poor with 40-45 per cent, as there was no heavy demand from upcountry traders. Only one or two orders were received by some turmeric exporters. Till December 15 the same price and poor sales will continue. But anyhow the price will not surge high," said R.K.V. Ravishankar, President, Erode Turmeric Merchants Association.

He said that the farmers and stockists are having huge stock with them and some traders have come forward to sell their commodity below Rs 6,500 a quintal.

The price of the all varieties, including the hybrid turmeric variety, decreased by Rs 100-200 a quintal. The buyers too are reluctant to buy more as they feel the price may decrease further.

At the Erode Turmeric Merchants Association sales yard, the finger variety was sold at Rs 4,033-6,191; the root variety Rs 3,880-5,439.

Salem Hybrid: The finger variety fetched Rs 5,499-6,691 and the root variety Rs 4,460-5,834.

Of the 1,088 bags that arrived, only 401 were sold.

At the Regulated Market Committee, the finger variety quoted Rs 5,301-6,289 and the root variety Rs 4,760-5,599. Of the 1,277 bags on sale, 1,009 found takers.

At the Erode Cooperative Marketing Society, the finger variety was sold at Rs 5,041-6,199 and the root variety Rs 4,805-5,699. All the 870 bags were sold.

At the Gobichettipalayam Agricultural Cooperative Marketing Society, the finger variety fetched Rs 4850 to Rs 5930 a quintal, root variety Rs 4500 to Rs 5341 a quintal. Of the arrival of 296 bags of turmeric 278 bags were sold.

Rice millers show no interest to sell at current rates

Karnal



After witnessing a continuous fall over the last few days, Pusa-1121 varieties improved on fresh buying, while other aromatic and non-basmati varieties managed to maintain their previous

levels on moderate buying on Thursday.

Amit Kumar, proprietor of Ginni Rice, told*Business Line* that bulk buyers have taken advantage by buying at lower levels.

Though, Pusa-1121 varieties have witnessed some recovery, any further major uptrend at present is unlikely, he said.

A sluggish trend prevails in the market, said Tara Chand Sharma, proprietor of Tara Chand and Sons. Bulk buyers and retailers are not interested in building inventories and they are placing orders based on their requirement.

Rice millers are also not showing much interest in selling at current levels, he added.

Market may continue to witness a range-bound movement in the coming days. In the physical market, Pusa-1121 (steam) improved by Rs 300 to Rs 8,800, while Pusa-1121 (sela) went up by Rs 250 to Rs 7,750-7,800 a quintal. Pure Basmati (Raw) quoted at Rs 12,500 . Duplicate basmati (steam) sold at Rs 7,500 .

Sharbati (Steam) sold at Rs 5,000-5,100, while Sharbati (Sela) quoted at Rs 4,650 .

Permal (raw) sold at Rs 2,350, while Permal (sela) was at Rs 2,400 . PR-11 (sela) sold at Rs 3,200 while PR-11 (Raw) quoted at Rs 3,000 .

PR14 (steam) sold at Rs 3,350.

Paddy arrivals

Meanwhile, paddy arrivals dropped to around **50,000** bags at the Karnal Grain Market Terminal.

About 10,000 bags of PR paddy arrived and quoted at Rs 1,325-50, around 25,000 bags of Pusa-1121 arrived and sold at Rs 3,750-4,000, while 15,000 bags of Sharbati arrived and sold at Rs 2,300. 500 bags of Pure Basmati sold at Rs 5,750 a quintal.

Weak futures, low demand drag edible oils



A bearish trend prevailed in edible oils market on Thursday in the absence of physical demand.

The futures market was also weak, while stockists kept away from fresh bets amid aggressive selling.

On the Bombay Commodity Exchange, prices were mixed with

Better Than Olive Oil **Mumbai :** soya and rapeseed oil dropping by Rs 5 and Re 1 for 10 kg each.

Groundnut and cotton refined oil inched up by Rs 10 and Rs 7 each, while

sunflower and palmolein ruled unchanged.

Sources said that local refineries have cut their rates for palmolien and soya oil by Rs 5 each.

Improved arrivals of oilseeds at producing centres and a firm Indian rupee also aided the bearish trend.

Towards the day's close, Liberty was quoting palmolein at Rs 605, super palmolein at Rs 625, super deluxe palmolein at Rs 645, soyabean refined oil at Rs 675 and sunflower refined oil at Rs 730. Ruchi quoted palmolein at Rs 605, soyabean refined oil at Rs 665 and sunflower refined oil at Rs 710. Allana was quoting palmolein at Rs 605, super deluxe at Rs 645, soyabean refined oil at Rs 670 and sunflower refined oil at Rs 735.

Resellers were offering palmolein at Rs 595 ex JNPT.

In Rajkot, groundnut oil inched up to Rs 1,290 (Rs 1,230) for *telia* tin and loose (10 kg) up by Rs 45 to Rs 825.

Malaysia BMD crude palm oil's January contracts settled at MYR 2,628 (MYR 2,642), February at MYR 2,641 (MYR 2,656) and March at MYR 2,645 (MYR 2,658).

The Bombay Commodity Exchange spot rates (Rs/10 kg)

were: groundnut oil 850 (840), soya refined oil 665 (670), sunflower exp. ref. 660 (670), sunflower ref. 720 (715), rapeseed ref. oil 744(745), rapeseed expeller ref. 714 (715) cottonseed ref. oil 652 (645) and palmolein 595 (595).

Higher output hopes crush mustard

Indore :

The sluggish trend continued in mustard and oil on weak demandon Thursday.

In Indore, mustard oil ruled stable at Rs 682 for 10 kg (down Rs 8 from last week).

In Neemuch and Moorena mandis also, mustard oil ruled flat at Rs 675 and Rs 685 respectively.



A section of traders said that with the rise in sowing area of mustard this year and adequate carryover stocks, the outlook for mustard oil has turned bearish.

However, as demand picks up during winter,

mustard oil may gain in the coming days, said Vinod Choudhary, an Indore-based broker.

With slack demand in mustard oil, plant deliveries for Jaipur line on Thursday declined to Rs 3,815-20 a quintal (Rs 3,850-55 last week).

Slack demand also dragged mustard in the past one week by Rs 100-150 with price on Thursday being quoted at Rs 4,900-5,100 , raida ruled stable at Rs 3,350.

In futures also, mustard traded lower with December and January contracts on the NCDEX closing at Rs 3,713 (down Rs 26) and Rs 3,781 (down Rs 33) respectively.

According to a trader, mustard will rule sluggish in the coming days on hope of higher crop output this year.

Arrival of mustard seeds across the mandis in country on Thursday declined to 90,000 bags (1.10 lakh bags last week)with Rajasthan leading with 50,,000 bags, followed by Uttar Pradesh with 12,000 bags, Punjab/Haryana with 9,000 bags,

Madhya Pradesh 7,000 bags, Gujarat 5,000 bags, while 7,000 bags were offloaded elsewhere in the country.

Pepper sellers hold back, eye Rs 600 a kg



Kochi

The uptrend in pepper prices on spot and futures markets continued on Thursday on good demand amid tight availability.

No selling pressure was seen. Primary market dealers said that they have not even seen 100 kg of pepper for about a week now.

Pepper growers and primary market dealers are holding back, hoping that prices will touch Rs 600 a kg, some primary market dealers in Idukki said. As the next crop is estimated to be lower, they expressed the hope that the prices rule firm over the following weeks.

Domestic demand has started picking up in North India, a major pepper markets, they said.

Arrivals continued to remain tight. Only 10 tonnes of farm-grade pepper arrived on Thursday and the offtake was eight tonnes at prices ranging between Rs 490 and Rs 500, depending on quality and area of production. On the NMCE, December and January contracts increased by Rs 304 and Rs 960 respectively to Rs 51,830 and Rs 52,370 a quintal.

Total turnover moved up by four tonnes to 21 tonnes. Total open interest remained unchanged at 13 tonnes.

On the IPSTA, all contracts were steady at previous levels despite sharp rise in turn over which surged by 131 tonnes to 132 tonnes.

Spot prices rose by Rs 200 to Rs 49,000 (ungarbled) and Rs 51,000 (garbled) a quintal.

Export prices have gone up following rise in prices coupled with strengthening of the rupee against the dollar to \$8,775-8,800 (c&f) for Europe and \$9,050 a tonne (c&f) for the US.

Spot sugar rises on higher transport charges



Mumbai :

Sugar prices ruled higher by Rs 20-25 a quintal for new arrivals at mill level on Thursday.

In the Vashi wholesale market, spot prices increased by Rs 10 on higher transportation charges due to shortage of trucks at producing centres.

Need-based *naka* trade took place at steady level keeping sentiment calm at the end of the day, said sources.

"As new sugar supply from mills is expected to speed up in the coming days and in absence of neighbouring States' or export demand Maharashtra's mills will continue to sell in wholesale markets in the State," an observer said. As Vashi market carries about 110-115 truckloads of inventory stockists are buying new stocks after selling old stocks.

Arrivals at Vashi market continued to be 60-61 truckloads (of 100 bags each) while local dispatches were 59-60 loads. On Wednesday, 16-18 mills offered tenders and sold 67,000-68,000 bags old stocks at Rs 2,690-2,790 (Rs 2,690-2,790) for S-grade and Rs 2,800-2,980 (Rs 2,800-2,980) for M-grade.

New S-grade variety was sold at Rs 2,810-20 while new M-grade was sold at Rs 3,020-30.

The Bombay Sugar Merchants Association's spot rates were: S-grade Rs 2,872-3,001 (Rs 2,872-2,990) and M-grade Rs 3,012-3,212 (Rs 3,012-3,202). *Naka* **delivery rates were:** S-grade Rs 2,830-2,900 (Rs 2,830-2,900) and M-grade Rs 2,940-3,035 (Rs 2,940-3,035).

Uttar Pradesh rates were: Muzzafarnagar Rs 3,200.

Sheet rubber drops to Rs 150/kg

Kottayam: Physical rubber prices ended in red on Thursday. Selling from dealers and growers increased as prices were close to the next support level of Rs 150 and a fall below the above level might put further pressure on traders. Since there were no quantity buyers to absorb the inflow, prices slipped amidst low volumes. The trend was mixed as latex improved a tad on better demand.

Sheet rubber weakened to Rs 150 from Rs 151 and Rs 152 a kg respectively, according to traders and the Rubber Board.

The grade dropped to Rs 147 (Rs 149), according to dealers.

In the futures market, the December contracts slipped to Rs 151.80 (Rs 151.90), January to Rs 153.35 (Rs 153.90), February to Rs 155.51 (Rs 156.34) and March to Rs 160 (Rs 160.65) while April contracts were inactive on the National Multi Commodity Exchange.

December futures closed at \$265.5 (Rs 160.48) on the Tokyo Commodity Exchange.

Spot rubber rates/kg were: RSS-4: 150 (151); RSS-5: 140 (142); Ungraded: 137 (138); ISNR 20: 143.50 (144) and Latex 60%: 107.50 (107).

John Deere launches Rs 1.4-cr cane harvester



Ready for action: John Deere sugarcane harvestor Ch 330 during its launch at the 'Eima Agrimach India 2013' in the Capital on Thursday — Ramesh Sharma

New Delhi :

Global farm equipment major John Deere has launched a sugarcane harvester specially designed for Indian conditions, where average landholdings are small and the cane is planted in narrow rows with little spacing.

Features

The harvester CH330, priced at Rs 1.4 crore a unit, is powered by a 198 horse power engine, four-wheel drive and advanced hydraulic technology, and can help cut up to 80 tonnes of cane an hour.

John Deere is betting on this product to expand its share in the cane harvester market that has witnessed good growth in recent years, with both farmers and sugar millers using more of these machines to cut cane.

Labour availability

The availability of labour for cane-cutting has become a challenge as rural wages have increased, leading to higher cultivation costs.

"There is a growing demand for cane harvesters from Indian consumers as labour shortage is becoming a challenge," said Ravi Menon, Director, Sales and Marketing, John Deere India.

The company plans to initially target States such as Maharashtra, Gujarat and Tamil Nadu.

John Deere India Pvt Ltd Managing Director Satish Nadiger expects the company to sell about 18-20 harvesters this year.

Two units have been booked by an entrepreneur in Maharashtra and a sugar factory in Gujarat on Thursday, officials said, adding that the company planned to provide financial options to buyers.

cultivation cost

Farmers can expect a payback in about three years, as the cost incurred for mechanised harvesting is almost same or marginally lower than that of manual harvesting, Nadiger said.

Cutting or harvesting account for almost 35 per cent of cultivation cost.

Global rival

While farmers in Maharashtra spend about Rs 300-350 a tonne, their counterparts in Tamil Nadu incur a cost of Rs 450-750 a tonne, with the costs being at the higher end during summer due to lack of labour.

John Deere's global rival, New Holland, dominates the cane harvester market in India with a 98.9 per cent market share. It has already sold about 400 units.

"Harvesting is mechanised in only about half a per cent of the 5 million hectares of cane area in India," said Gaurav Sood, Head of Crop Solutions at New Holland Fiat (India) Pvt Ltd, pointing to the huge potential that exists in the country.

India is the second largest producer of sugar after Brazil, where mechanised harvesting is pegged at 16 per cent of the total acreage.

reservoirs levels

New Holland, which sold 130 units in 2012-13, has seen a sluggish start this season as cane area was affected by drought in parts of Maharashtra and Karnataka.

"We have sold about 40 units this year and expect to close the year with about 80-90 units," Sood said, predicting a big jump next season.

With reservoirs levels brimming to their capacities across key cane growing regions, farmers are likely to plant more acreage for the 2014-15 season.

To cater to the rising demand of cane harvesters in India, New Holland is expanding its assembly capacity at Chakan near Pune, where it has taken up 70 acres to set up a new unit.

leading states

Maharasthra, Tamil Nadu, Gujarat and Karnataka are the leading in terms of adoption of mechanised harvesters, while the concept is yet to take off in Uttar Pradesh, where recovery is lower than other key producing States. Analysts said mechanised harvesting is set to catch up with the Government promoting the concept custom hiring, where equipment purchased by entrepreneurs are offered on lease basis.

Besides, various subsidies offered by both the Centre and States are expected to aid the farm mechanisation process.

'Investments hit as nation wavers on GM crops research'

Hyderabad :

Research and investments are suffering as the country is wavering on genetically modified crops research, according to Swapan Kumar Datta, Deputy Director-General of Indian the Council of Agricultural Research.

The scientific community, agricultural research companies and research bodies are in a state of confusion as decisions on GM crops research have been delayed inordinately, he said.

"It has been two years since the Genetic Engineering Appraisal Committee met. Decisions taken at the only meeting held early this year have been put on hold. Young researchers in scientific institutions are asking what is happening. Investments are suffering," he told *Business Line*.

Food crops

Swapan Datta, also a member of the appraisal committee, has strongly objected to the inordinate delay in allowing or not allowing research in GM crops.

"We should debate whether to accept it or not. We can't keep on putting on hold the decisions.

"We should discuss how best we can address the challenges," he said.

Datta, a GM scientist himself taking up research on rice, was here to attend a global meet on bacterial blight in rice.

The Government had put on hold the decisions taken at the last GEAC meeting, keeping in view the strong public outcry over GM research in food crops.

The minutes, which were put on the GEAC website, were withdrawn within no time.

Datta said the country could not differentiate between food and non-food crops and allow GM research in non-food crops.

"If it is good in one crop, it is good for all. If it is not good, it is not good for all crops," he said.

The votaries of GM technology site the example of cotton and argue that the transgenic technology should be allowed in all crops, including food crops.

But the proposal to introduce GM trait in brinjal evoked strong public outcry, forcing the Government to put a cap on GM research.

The last GEAC meeting, however, allowed certain field trials in castor, rice, maize wheat and cotton, triggering protests.

On the other hand, agricultural research companies are arguing that they have lost two years of research cycle because of delay in getting permission.

GM crops are designed to offer protection against certain insects, have more resistance to water salinity, and use nitrogen they need to grow more efficiently.

No confidence motion passed against GCMMF chief?

Ahmedabad :

At least 13 of the 16 board members of the Gujarat Cooperative Milk Marketing Federation (GCMMF), which markets the Amul brand milk and its products, have reportedly passed a no-confidence resolution against their Chairman Vipul Choudhary at Anand on Thursday.

Choudhary told *Business Line* over phone that Kheda District Milk Cooperative Union President Ramsinh Parmar had raised a point-of-order at the Board meeting on the agenda. "I presided over the meeting, asked the Managing Director (R.S. Sodhi) to get the agenda approved by the Chairman and distribute it to the Board members. Thereafter, I adjourned the meeting," he said, without confirming whether the majority of Board members had passed a resolution against him.

However, both Choudhary and Parmar were not present when the resolution was passed, reports said.

Last month, the Board members, representing district milk unions, had served a no-confidence notice against Choudhary in the wake of his meeting with Congress Vice-President Rahul Gandhi here.

Choudhary, a former Congress leader and currently Chairman of Mehsana Milk Union, had switched allegiance to the ruling BJP a few years ago but was seen warming up again with leaders of his former party. According to reports, he did so as he is eyeing the chairmanship of National Dairy Development Board whose chief Amrita Patel's term comes to an end in a couple of months following the extension granted to her recently.

When member-unions revolted against him, Choudhary got a High Court stay on the no-confidence notice on the plea that there was no such provision in the law. However, the Board members met on Thursday and passed the resolution, saying that the court had not prohibited their meeting.

Jeera crackles on better crop prospects

Rajkot

On the back of weak local demand, spot prices in jeera dropped. With sowing progressing smoothly and favourable weather supporting higher acreage, the market has turned bearish. Prices in the futures market also declined on poor spot sentiments.

On the NCDEX, jeera December contract decreased by Rs 45 to Rs 12,405 a quintal with an open interest of 6,171 lots. NCDEX March jeera slipped by Rs 27.50 to Rs 12,835 with an open interest of 3,951 lots.

On the Rajkot APMC, jeera was traded lower by Rs 10 at Rs 2,070-2,325 for 20 kg. In Unjha mandi, the spice declined by Rs 12-15 to Rs 2,065-2,845 . About 8,000 bags of jeera arrived in Gujarat and demand remained at 7,500 bags.

Traders said that demand is not improving as expected as the area under jeera is expected to expand and crop prospects look good. Analysts said that offloading of positions by speculators due to sluggish demand in the spot market mainly put pressure on jeera. The total carryover stocks of jeera are currently estimated at 8 lakh bags against 10 bags during the same time a year ago.

Business Standard

Sugar outlook: Pain could continue for some more time

Globally, sugar is in a state of surplus for the fourth year in a row

Twenty-two years after the liberalisation policy adopted by India, the <u>sugar</u> sector is one of the last ones to have been freed of government shackles. As could be with any other sector, the sugar industry, too, will need to go through adjustment to find its equilibrium. The process is painful and the pain is anything but over. The fundamental situation globally and locally remains unfavourable for the millers as well as farmers.

Globally, sugar is in a state of surplus for a fourth year in a row. According to the US Department of Agriculture (USDA), global stockpiles will increase to an alltime high of 43.4 million tonnes (mt) in the year ending in 2014. The global sugar surplus in 2013-14 at 6.1 mt is the third largest, and is most likely to be revised up. The largest sugar surplus was recorded in 2011/12 at 7 mt. In the northern hemisphere, Thailand and India will have a large production and exportable surplus. In southern, crushing in Brazil has been extended till December due to rains. Clearly, large supplies will remain burdensome even this year.

The currency factor is further putting pressure on the prices to go lower. Since mid-October, the Brazilian real has depreciated by 11.4 per cent, Thai baht 4.2 per cent and <u>rupee</u> 1.3 per cent. A cheaper currency makes exporters more aggressive and pushes prices lower. The dollar index has strengthened 2.5 per cent for the same period making the dollar-denominated commodity cheaper. The price scenario gets murkier if the US Federal Reserve were to start the

tapering of quantitative easing (QE). The world sugar prices are already at threeyear lows and could go lower. The US Commodity Futures Trading Commission (CFTC) data show large speculators and hedge funds remain substantially long. This makes sugar prices all the more vulnerable to a sell-off.

The Indian sugar year 2013-14 has opened with a 9-mt stock. Good weather and very remunerative prices have made sure the production is sustained at close to 25 mt. Against this, the consumption is close to 23 mt. Of the extra 11 mt, India will need to export at least 4 mt if prices were to come out of this bearish trap. But given the global demand, supply and price scenario, 4 mt looks ambitious. The Indian currency movement is not helping either, specially when looked at in light of the currency depreciation of the competitors discussed above. Lately, sugar exports have picked up due to corrected prices and weak currency. Logistic issues in Brazil hampered sugar exports and helped Indian exporters. Recently, geo-political problems have erupted in Thailand. So far, it has not impacted exports, but the risk premium there could drive some demand for Indian sugar, specially in geographically close countries.

Historically, higher sugarcane production has been associated with lower cane diversion. But the same may not be the case this year due to the delay in crushing operations. The latest rabi acreage numbers show that in Uttar Pradesh, farmers have sown wheat in around 6.4 million hectares till November 28, which is almost 17 per cent more year-on-year and is at the highest level in five years. Clearly, farmers who wanted to switch from sugar have harvested and diverted some of the cane to Gur. This will impact the total production number. But will not have much impact on the overall scenario.

Spot prices are the lowest since March 2012 and down 16 per cent year-on-year. Looking at the supply-heavy global and domestic scenario, the path of least resistance remains downwards. Crushing has just begun and fresh supplies could take prices lower by five-seven per cent by January. Beyond which exports will need to be watched carefully. Consistent exports of 200,000-300,000 tonnes every month could see the sugar price improve by March-April; the lack of which could see the price fall sharper and the sector crisis deepen.

FACT to market Neera coconut drink

The vascular sap collected from immature unopened coconut inflorescence, is popularly known as Neera in fresh form

Public sector Fertilisers and Chemicals Travancore (<u>FACT</u>) has said it will foray into marketing of <u>Neera</u>, the non-alcoholic and nutritious drink from coconut flower sap, and other agro-products.

The aim is to procure Neera from manufacturers and market it, Fact chairman and managing director Jaiveer Srivastava said. The vascular sap collected from immature unopened coconut inflorescence, is popularly known as Neera in fresh form.

All over South India, FACT has about 8,000 dealers depots. Utilising this extensive network, the company proposes to market this product. Meanwhile, the Fact Engineering and Design Organisation (FEDO) will begin functioning independently from January 1 and open offices soon in various cities including Delhi and Mumbai and also in Middle East, he said, and added, "it will take up consultancy projects and we may go in for turnkey projects and execution."

It is targeting production of 30 million tonne of ammonium sulphate and factamfos by 2018-19 against the present production of 1 million tonne, he said.

The PSU is going for a Rs 8,000-crore expansion plan, including setting up of a Rs 5,200-crore new ammonia urea complex at Ambalamedu with a capacity of one million tonne a year, phosphoric and sulphuric acid plant, and a new factamfos plant at Cochin division. There is already a 2,000 tonne per day capacity factamfos plant at the Cochin division.