#### 18-06-2015

### THE MORHINDU

Legumes increase soil fertility, yield of commercial crops



These crops can fix atmospheric nitrogen through their root nodules. This reduces the use of chemical fertilisers like urea and ammonium nitrate.

At a time when decreasing soil fertility especially due to indiscriminate use of chemical fertilisers and prolonged cultivation of commercial crops has become a cause for concern among farmers, legume vegetables have turned out to be a boon for addressing this issue.

Scientists feel that growing the legume vegetables at least once in a season will help in increasing soil fertility as they have the capacity to fix atmospheric nitrogen through their root nodules. This reduces the use of chemical fertilisers like urea and ammonium nitrate.

Of course, growing legume crops for the natural fixation of atmospheric nitrogen was an age-old practice of traditional farmers.

But the process has now been discontinued mostly by those growing commercial crops due to lack of awareness.

Dr. T. S. Aghora, principal scientist at the Indian Institute of Horticultural Research located at Hessarghatta near Bengaluru who has been working on legume vegetables, says various studies have shown that growing legume vegetables can increase soil fertility that will in turn increase the yield of regular crops by a range of 10 to 15 per cent.

A study by IIHR has showed that growing legume vegetables along with coconut plantation can help increase coconut yield by about 10 per cent, he says. Similarly

separate studies by various institutes and organisations too have indicated an increase in paddy yield by over 10 per cent when legume vegetables are grown as a rotational crop and an increase of 10 to 12 per cent in sugarcane yield when legume vegetables are grown as an intercrop.

Cultivation of all the crops including cereals and regular vegetables will get benefitted if the legume vegetables are grown once a season, Dr. Aghora notes.

Apart from fixing atmospheric nitrogen, the legume vegetables also help in increasing the organic content of the soil as they produce huge quantum of foliage that gets added into the soil. In addition to this, they also enhance the water-holding capacity of soil, he points out. They have a positive impact on human health too as these protein-rich legume vegetables can help fight protein and energy-deficiency induced malnutrition.

The advantage of legume vegetables is that they are all short-duration crops whose life cycle will get completed within 70 to 75 days. Hence they can be grown either as a rotational crop or as an inter-crop between the regular commercial crops depending upon the requirements.

In fact the legume vegetables start yielding within 45 to 50 days of sowing and fit into any cropping systems, the scientist points out.

Of late the scientists are focusing on developing high-yielding and diseaseresistant varieties which can fetch good incomes to farmers.

These short-duration varieties help enhance the incomes of farmers not just because of increase in their yield, but also due to the fact that they reduce the spending in terms of application of fungicides and pesticides.

The IIHR itself has released 24 different improved varieties of legume vegetables in the crops of French bean, garden pea, dolichos bean, and cow pea while various other research institutes and agricultural universities too have come out with their own varieties.

In fact some of the legume vegetable varieties go beyond the conventional concept that they are meant for the consumption of common people residing mostly in rural areas as they are gaining popularity in niche urban markets.

Such popular varieties include the 'whole pod edible' variety of garden pea.

Named as Arka Apoorva (Arka stands for river Arkavathi on whose banks the IIHR is located), the variety's entire pod is edible as the pod walls do not have fibrous layers. This reduces wastage.

The pods of Arka Apoorva can be eaten either as fresh salad or after cooking and frying. The agricultural scientists feel that these whole pod edible peas present an opportunity for Indian farmers to explore their potential in the country's niche urban markets.

Similarly there are garden pea varieties which have resistance to rust and powdery mildew diseases. Also, there are yard long beans varieties like Arka Mangala which is a climber that produces pods with a length of 75 to 80 cms that are extremely popular in niche market.





The summer monsoon has been showing a weakening trend over the past century with decreasing rainfall over large regions of the Indian subcontinent. The monsoon occurs because the land heats up much more than the ocean and the warm air over the land rises and results in low pressure.

This causes the rain-bearing winds from the relatively cooler ocean to blow on to the land and cause rainfall. That is, it is the strong thermal contrast between land and ocean that results in a strong monsoon.

However, a recent study by Dr. Roxy Mathew Koll of the Centre for Climate Change Research, Indian Institute of Tropical Meteorology, Pune and others, and published recently in the journal *Nature Communications* contends that this thermal contrast has been decreasing in the past decades, i.e., the land has been cooling and the ocean warming and the monsoon has shown a decreasing trend during the past century.

Ideally, under a global warming scenario the land temperature should increase greatly in the hot summers and serve as a strong monsoon driver. But, in the case of the Indian subcontinent, over the past century, that has not been the case. Observed data dating from the 1870s are available for the summer monsoon rainfall, from the Indian Meteorological Department and other sources. Using the data from 1901-2012, it was found that the rainfall has been decreasing over central South Asia — from south of Pakistan through central India to Bangladesh.

The decrease is highly significant over central India where agriculture is still mostly rainfed, with a reduction of up to 10-20 per cent in the mean rainfall.

Quite a few other studies indicate that the monsoon rainfall is weakening over the South Asian region during the past half century (since 1950s). Some of these studies suggest that though the extreme rainfall events have increased over some regions, the frequency of moderate-to-heavy rainfall events has decreased over the subcontinent.

The reduction in land-sea temperature contrast is attributed mostly to a strong warming in the Indian Ocean on a multi-decadal scale with the latest reason being climate change under a global warming scenario.

The surface warming in the Indian Ocean, especially in the western regions has reached values of up to 1.2 degrees C during the past century, much larger than the warming trends in other tropical oceans. The decrease in the land-sea thermal contrast surface temperature trends (1901-2012) is also visible in the upper atmosphere, as the warming trends in the ocean surface are transferred to the atmosphere above through convective processes.

Apart from the ocean warming, a part of the decrease in land-sea temperature difference is also due to suppressed warming over the Indian land mass, possibly due to increased aerosol levels. Aerosols in the atmosphere reflect the sun's heat back into space and cause a cooling effect.

The warming Indian Ocean also plays a role in weakening the monsoon circulation. Increased warming in the ocean enhances the large-scale upward motion of warm moist air over the equatorial ocean. This enhanced upward motion over the ocean is compensated by subsidence of dry air over the subcontinent, inhibiting convection and rainfall over the Indian landmass. This means that a warming Indian Ocean has resulted in surplus rains over the ocean at the cost of the monsoon rains over land, simultaneously drying the Indian subcontinent.

#### Rain brings no cheer to Thullur ryots

Mopping up his dishevelled hair, 45-year-old Sk. Sivaiah glances across the stretch of dry patch of land from his house. Hoards of buffaloes are mowing on the patch of barren land which was once a paddy field bristling with activity.



He has just come home after buying some building material for his house under construction. Quite an unusual time to take construction, but Sivaiah has hardly anything else to do after giving his only possession, a half acre of paddy field, to the government as part of Land Pooling Scheme for the construction of the Capital.

The onset of southwest monsoon triggers farm activity and farmers get busy with soil preparation, procurement of seeds and fertilisers. Sivaiah himself used to lease 10 acres of farm land cultivating Paddy and Maize.

But these days, Sivaiah is engaged with construction of the house. The reason, there has been unauthorised ban on cultivation in all the 29 villages notified as Capital region. The Department of Agriculture has stopped its activity in these regions. Fertiliser and seed dealers have stopped supplies to the villages.

"I do not know any other work other than farming. I have given away my only possession of land to the government but I have not taken the annuity cheques as there is no clarity on village extension sites. For now, I am busy with the construction of my house," Sivaiah says.

Across the road, a group of farmers sit whiling away their time as there is no agricultural activity. The tiny seed and fertilizer shops are now giving way to mobile and fancy stores.

"I used to cultivate Maize and Cotton in 20 acres of leased land. Farming has become an unproductive exercise and I am looking for a way to get out of it, when Chandrababu zeroed in on Thullur," says Maddineni Sambasiva Rao, a big farmer from the village. The largest 'Mana Gromor,' a company outlet of Coromandal fertilizers is located at Pedaparimi, at a distance of 4 km from Thullur. Huge stocks of Complex fertilisers have been stacked up in the godown with no takers.

"Our annual turnover is around Rs.4 crore, but with no farm activity in Thullur, we expect the sales to come down to just Rs.2 crore. We are supplying 20:20, DAP and

20:28 only to two villages of Tadikonda and Kantheru, where sowing of Cotton is expected to begin from July," says Sk. Baji, outlet manager.

The mandals of Thullur, Tadepalli and Mangalagiri have 27, 948 hectares of cultivable land, out of which Paddy accounts for 4,703 hectares, Maize 6,013 HA and Cotton 8,134 HA. The horticultural crops are grown on jareebu lands and are spread over 5,128 hectares.

With the State making it clear that no further cultivation would be allowed, farmers stare at an uncertain future. "We have given the land in LPS after placing our trust in Chandrababu Naidu. If his efforts to build a world class Capital come true, may be my grand children will enjoy the fruits, or else I will sell away my land," says Jammula Sadananda Chowdary.

#### Bonus for lentils, higher MSP for paddy

To boost production of pulses during the kharif season, the Centre announced on Wednesday a bonus of Rs. 200 a quintal on the revised minimum support price for tur, moong and urad dal (lentils) for the marketing season of 2015-16.

The minimum support price for paddy was increased by Rs. 50 a quintal for the kharif marketing season of the financial year.

The Cabinet Committee on Economic Affairs, chaired by Prime Minister Narendra Modi, decided to grant the bonus to encourage farmers to enhance the area under pulses cultivation and invest in increasing the productivity of the crop.

The prices of pulses have shot up by over 50 per cent on an average in the past year as inclement weather cut production and the area under cultivation shrank.

As much as 5,000 quintals of pulses had to be imported on the government account.

The Cabinet Committee approved the minimum support price, inclusive of bonus, for tur (arhar) dal at Rs. 4,625 a quintal for this year as against Rs. 4,350 last year; moong dal at Rs. 4,850 against Rs. 4,600; and urad dal at Rs. 4,625 against Rs. 4,350.

The minimum support price for the common variety of paddy was fixed at Rs. 1,410 a quintal against Rs. 1,360 last year and for Grade A variety, at Rs. 1,450 against Rs. 1,400.

#### Focus on technology



Mechanised harvesters are increasingly being used in fields due to manpower shortage in Erode.

#### Kuruvai cultivation to be taken up on 7,500 acres of land

Kuruvai paddy cultivation is expected to be taken up on 7,500 acres of land in filter point areas of the district this year with farmers being supported under the special package announced by the State government.

The normal kuruvai area is 16,000 acres in the district. But given the poor storage in the Mettur reservoir and delay in release of water in the Cauvery, kuruvai paddy could be raised in only the filter point areas in the district.

The Agriculture Department is gearing up to implement the special kuruvai package announced by Chief Minister Jayalalithaa to help farmers raise the crop.

The package would be implemented in filter point areas in Lalgudi, Andhanallur, Musiri and Manachanallur, areas.

Apart from three-phase power supply for 12 hours a day, the package envisages providing Rs. 315 an acre to farmers for purchase of bio fertilizers and micro nutrients.

The amount would be deposited in the bank accounts of the beneficiaries.

This apart, the Agricultural Engineering Department would carry out free transplantation of nurseries using transplanters in about 1,500 acres in the district.

#### "Meagre" hike in MSP for paddy disappoints farmers

Farmers organisations have expressed disappointment over the "meagre" increase in the minimum support price (MSP) for paddy announced by the Union government on Wednesday.

The Centre on Wednesday announced a hike of Rs.50 a quintal in the MSP for paddy. Farmers' representatives regretted that the hike has become an annual ritualistic announcement without considering the distress faced by farmers.

"It has become a routine to give a token hike in the MSP every year without considering important factors or the recommendations of the Commission for Agricultural Costs and Prices. The hike has been made without taking into account the rise in prices of inputs and the problems faced by farmers," observed Mahadhanapuram V.Rajaram, Working President, Cauvery Delta Farmers Welfare Association. Mr.Rajaram said that anything less than Rs.2, 000 a quintal would not be acceptable for farmers.

Reacting with anger to the announcement, A.Nagarajan, State organiser of the Farmers Wing of the Tamil Maanila Congress, said that even as per the reports of the agricultural university, the cost of production of a kg of paddy is Rs.30. The M.S.Swaminathan Commission has recommended that farmers should be given 50 per cent profit over and above the cost of production. "If these were to be taken into account, the MSP should be fixed at Rs.4, 500 a quintal" he said.

The government has not considered the distress situation faced by the farmers and have announced a "token and namesake" hike, he regretted. Farmers were being forced to commit suicide as they are unable to get remunerative prices for their produce; he said and demanded the fixing of MSP at Rs.3, 000 a quintal of paddy.

P.Ayyakannu, president, Desiya-Thennaga Nadigal Inaippu Vivasayigal Sangam, said that while government servants were being given regular and periodic increase in their pay, farmers were not being given their due. Farmers were reeling under a crisis, unable to get adequate credit and remunerative price for their produce. The announcement on the hike has also caused more distress among farmers, he said and urged the government to revise the MSP to at least Rs.2, 500 a quintal.

#### "Follow SRI technique in 'kar' paddy cultivation"

With the southwest monsoon playing truant in the district, farmers have been urged to follow 'System of Rice Intensification' (SRI) technique to get maximum yield with minimum quantity of water.

In a statement, Joint Director of Agriculture C. Chandrasekaran said water is being released from Papanasam, Servalar and Manimuthar dams for 'kar' paddy cultivation on around 37,435 acres in Tirunelveli and Tuticorin districts. Paddy seeds for this season

like ASD 16, ADT 36, COR 50 and JGL 1798 have been sufficiently stocked in the Agricultural Extension Centres and private seed retail shops.

Important fertilizers like urea, DAP, potash and complex fertilizers, required for this crop season have also been stocked sufficiently in the primary Agricultural Co-operative Credit Societies and private retail shops.

However, the storage level in the dams is not so impressive even as the northeast monsoon that usually ensures copious inflow of water to all eleven dams in the district is still a non-starter.

Hence, the farmers are advised follow SRI system and to irrigate the paddy field to the depth of 2.50 cm of water. Farms should be irrigated only after the development of hair line crack in the soil.

By adopting SRI method of cultivation, farmers can cultivate twice the area with the water required for the traditional method of cultivation. The yield of paddy will also be more in the SRI method of cultivation than the traditional method. Hence, the farmers should follow SRI system to get maximum yield with minimum quantity of water, Mr. Chandrasekaran said.

#### Lab clears Nestle product

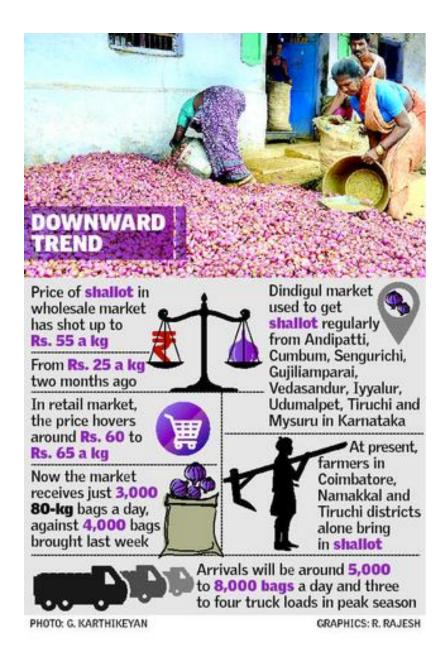
The tests performed at the Government Food Safety Laboratory in Coimbatore have cleared Nestle NAN PRO 3, a follow-up milk, of containing any harmful substances. Samples were lifted on June 2 following a complaint preferred by a consumer that the baby cereal contained live insects.

The samples provided by the consumer were not accepted as he had already opened the package. Hence, the officials took fresh samples upon instructions from the Tamil Nadu Food Safety Commissioner Kumar Jayant. – Staff Reporter

#### Prices of shallot shoot up as arrivals dwindle

Prices of small onion (shallot) shot up in the wholesale onion market here on Wednesday — to reach the highest level so far in this fiscal — owing to poor arrivals and slump in production.

Shallot arrival has been waning month after month, and shallot production in the district has not yet commenced.



At present, Dindigul market has been receiving shallot from Thuraiyur, Udumalpet, Namakkal and Dharapuram.

"Wholesale price of shallot has shot up to Rs. 55 a kg from Rs. 25 a kg two months ago. In retail market, price of shallot hovers around Rs. 60 to Rs. 65 a kg, depending on quality and size," says V. Rajendran, a wholesale shallot trader.

Price of big onion in retail market oscillates between Rs. 33 and Rs. 38 a kg and in the wholesale market its price swings from Rs. 23 to Rs. 28, say big onion traders. If this trend continues, shallot price will shoot up further in the wholesale market, traders add.

Normally, the market used to get shallot regularly from Andipatti and Cumbum in Theni district, Sengurichi, Gujiliamparai, Vedasandur and Iyyalur in Dindigul district, Udumalpet, Tiruchi and Mysuru in Karnataka.

Arrival from Mysuru is very poor now, and there is almost no supply from Iyyalur, Reddiyarchatram, Gujiliamparai, Sengurichi, Gujiliamparai and Vedasandur. Now, the entire market has been depending on arrivals from nearby districts and in Mysuru.

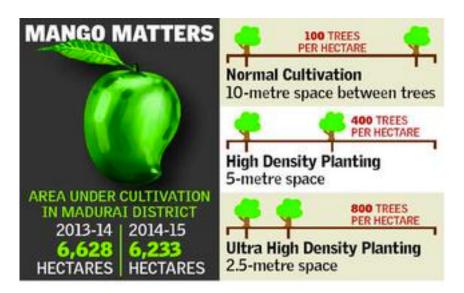
At present, farmers in Coimbatore, Namakkal and Tiruchi districts alone bring shallot to the market.

At present, the Dindigul market receives just 3,000 80-kg bags a day, against 4,000 bags brought last week. Arrivals will be around 5,000 to 8,000 bags a day and three to four truck loads in peak season. Within a week, prices of shallots rose to Rs. 55 from Rs. 45. Several godowns in the wholesale market are empty. Exporters too do not wish to lift shallot owing to high procurement price. Moreover, fresh shallots are wet and they have limited shelf life and unfit for exports. But, traders manage to sell them domestically.

But traders hope arrivals from Mysuru will increase in the months to come. But commencement of rainy season on western parts may hit yield, and thereby affect arrivals to the market, they fear.

Arrival of domestically grown shallot alone will stabilise supply and price, they add.

#### Ultra high density planting of mango introduced in district



As part of the National Horticulture Mission, the department of horticulture in Madurai has introduced ultra high density planting of mango this year.

"While high density planting of mango is being practiced by farmers in T. Kallupatti and Sedapatti for the last two years, the ultra high density planting, which will considerably increase the harvest for the farmers, has been introduced this year," said T. Padmini, Deputy Director of Horticulture, Madurai.

Under the ultra high density method, the mango trees will be planted closer together with lesser space left than in the high density and normal method of cultivation. "At least 800 trees can be planted in one hectare of land under this method. The target area to be covered under this method of cultivation in the district has been fixed at five hectares for this year as it is just being introduced," Ms. Padmini said.

Additionally, the target area to be covered this year under high density planting of mango and guava has been fixed at 130 hectares and 40 hectares respectively.

The area under cultivation of mangoes in the district experienced a sharp fall after 2013-14 owing to lack of rainfall and drought-like situation when many mango trees dried up.

While in 2013-14 the area under cultivation was 6,628 hectares, it decreased to 6,233 hectares in 2014-15.

#### **Drip irrigation must**

"With sufficient rain last year and good rainfall in the last two months in the district, technologically advanced methods like the ultra high density planting is being implemented to benefit the farmers. Farmers should, however, practise drip irrigation when it comes to cultivating mangoes," an official said, adding that many mango trees could have been saved two years back if the farmers had implemented the effective irrigation system.

Planting activities with regard to the new method of cultivation commenced at the beginning of June and would continue till December, he added.

#### Ramanathapuram gets Genetic Heritage Garden



The entertainment-starved people of the district could relax and enjoy their evenings as the much-awaited Genetic Heritage Garden developed with beautiful landscaping at Achadipirambu on the East Coast Road (ECR) near here was thrown open to the public.

The ecological garden, developed by the Tamil Nadu Horticulture Development Agency on a 10-acre site at a cost of Rs. 7.28 crore, was inaugurated by Chief Minister Jayalalithaa through videoconferencing on Wednesday.

The garden, showcasing the geographical divisions of the State, has been developed with eye-catching thematic elements.

The agency had developed the garden, representing 'Paalai' (parched wasteland and desert), one of the five landscapes defined in ancient Sangam literature.

Developed with beautiful landscaping, the garden promised to provide an ideal space for the people to relax. Though the garden has to reflect the Paalai landscape concept, the agency has added more greenery to attract visitors, officials said.

The park is expected to be one among the major tourist attractions in the district as the authorities have decided to allow film and television serial shootings there.

The entry fee would be Rs. 15 for adults, Rs. 10 for children and Rs. 2 for schoolchildren, the officials said. Parking fee would be Rs. 15 for two-wheelers, Rs. 40 for Light Motor Vehicles, Rs. 10 for autorickshaws, Rs. 75 for vans and Rs. 100 for buses, they said.

Public could use still cameras and video cameras inside the garden after paying Rs. 25 and Rs. 50 respectively, they said, adding professional photographers could take pictures for the visitors after paying Rs. 2,000 per month.

For film shooting the rate has been fixed at Rs. 20,000 per day and for TV serials Rs. 10,000 per day, the officials said.

The park has a long pathway for visitors to go around. While walking around, they could take rest in aesthetically designed thatched-roof Gazebo huts.

The oasis, sand dunes and desert plants like cactus would provide an ideal backdrop. Shady and flowering trees and ornamental plants are added attractions. "We will soon start food courts and make available play materials for children," the officials added.

#### 'Create awareness on importance of consuming iodised salt'

About 20 lakh children in the State are prone to Iodine Deficiency Disorders (IDD) and hence the personnel at the public distribution outlet should explain the importance of consuming iodine sale and sell it.

This was the message disseminated during the sensitisation and training on IDD for PDS personnel held here on Tuesday.

Organised by Tamil Nadu Salt Corporation Limited and supported by UNICEF, the training programme was inaugurated by District Revenue Officer S. Selvaraj.

He said that the project to sell iodine sale through ration shops was introduced as pilot projects in 11 districts in the State and Salem district is one of it.

#### **Training**

Organisers said that the training programme would increase awareness and motivate salesman to make a sale of the salt.

Also, improvisation of 'Arasu' salt supply chain was the focus of training.

Officials said that the State is the second largest producer of salt in the country with 16,500 workers involved in it producing 25.8 lakh tonnes every year.

The production of iodized salt is just 34 per cent of the total salt production and should be increased, they stressed.

#### Rubber price meet fails to arrive at consensus

A meeting convened by Chief Minister Oommen Chandy here on Wednesday to discuss the implementation of the price stabilisation scheme for rubber farmers ended inconclusively, with the government and representatives of planters and rubber producer societies failing to come to a consensus on procurement.

While the government proposed a procurement scheme through dealers approved by the Rubber Board, the planters demanded procurement through the State Warehousing Corporation. Pointing to the failure of previous procurement schemes, they feared that dealers would manipulate the market to their advantage.

#### **Collector initiates planting of saplings**

Collector M. Karunakaran commenced planting of saplings in view of the 'World Day to Combat Desertification' at Munneerpallam near here on Wednesday.

As the State government has planned to conduct massive planting of saplings across Tamil Nadu by involving Department of Forest and utilising the funds from Mahatma Gandhi National Rural Employment Guarantee Programme (MNREGP), it was decided to plant 20,000 tree saplings on the government lands and along important highways in the village panchayats on 'World Day to Combat Desertification' that falls on June 17.



After conducting a preparatory meeting on Monday last, digging of pits for planting the saplings was completed on Tuesday by the labourers hired under MNREGP. Subsequently, Department of Forest supplied 19,800 tree saplings while voluntary organisations sponsored 5,200 saplings, which were planted on Wednesday.

Dr. Karunakaran planted tree saplings at Munneerpallam near Palayamkottai in the presence of H. Vijayakumar, Project Director, District Rural Development Agency.

The Collector was present there and seen encouraging the labourers until they completed planting of 2,200 saplings.

"I'll pay surprise visits to this place whenever I happen to cross this spot to ensure the regular watering of the saplings," the Collector told the labourers.

He said that the scheme on planting of 3 lakh trees in three years as part of the Chief Minister's birthday celebrations had shown encouraging improvement as 1 lakh saplings had been planted during 2014-2015 and 97,987 saplings during 2015-2016.

"Before the commencement of northeast monsoon this year, the entire target will be achieved," Dr. Karunakaran said.

Mr. Vijayakumar said just over 25,000 tree saplings had been planted in all 425 village panchayats in the district on Wednesday alone.

#### Farmers seek expansion of irrigation network

Karnataka Neeravari Vedike, a conglomeration of farmers in the command area of Narayanpur Right Bank Canal (NRBC), demanded that the government expand the irrigation network in the area for effective utilisation of Krishna waters allocated to Karnataka.

Addressing a press conference at Reporters Guild here on Wednesday, A.C. Lingaraj Chukanatti, president of the forum, said that Karnataka was no able to completely utilise its share of Krishna waters allocated by Krishna Water Disputes Tribunal owing to lack of irrigation projects.

"As per the Krishna Water Disputes Tribunal Award, the NRBC gets a total of 41.38 tmcft of water — including 22.40 tmcft under A Scheme and another 18.98 tmcft under B Scheme. However, as much as 28 tmcft of water goes unused annually as we don't have an irrigation network to properly use it," he said.

Mr. Chukanatti said over 2 lakh hectares of agricultural land could be irrigated with the 41.38 tmcft water at 5,000 hectares a tmcft, but the State was able to irrigate even less than half of it.

"Of the 41.38 tmcft allocated to NRBC, 16.90 tmcft is presently used in irrigating 84,000 hectares of land, 12.34 tmcft is allocated to NRBC's yet-to-be-constructed stretch which is expected to irrigate 61.747 hectares and another 3.05 tmcft for the under-construction stretch of NRBC 9A distributary which is expected to irrigate 15,250 hectares. Even after completing the ongoing and to-be-undertaken projects, 9.09 tmcft of water, with which 45,903 hectares of land could be irrigated, would go unutilised," he said.

Venkatesh Patil, vedike member, said that the construction of 9A Distributory of NRBC would be the best feasible way to utilise the unutilised water. "The project would benefit farmers at 107 villages in Manvi, Sindhanur, Lingasugur, Deodurg and Raichur taluks. We have been asking for the project since 2008, but our cries are falling on deaf ears," he said

The farmers said that they would once again approach Chief Minister Siddaramaiah and Minister for Water Resources M.B. Patil with the demand for implementing the 5A Distributary project.

#### Farming critical to remove poverty: Togadia

Vishwa Hindu Parishad (VHP) working president Praveen Togadia has said that if the poverty alleviation campaign is to be made successful, the country should be able to produce enough food.

He was leading a seminar on propagating organic farming at Town Hall here on Wednesday.

Mr. Togadia said farmers should spread the message of organic farming, and a farm culture should be developed in villages.

Sree Narayana Dharma Paripalana (SNDP) Yogam general secretary Vellappally Natesan, who inaugurated the seminar, also stressed the importance of promoting organic farming. He said the SNDP Yogam would take the initiative to help farmers spread organic farming.

#### **VHP backs SNDP**

Special Correspondent writes from Alappuzha:

At a seminar on farming organised by the SNDP Yogam at Cherthala on Tuesday, Mr. Togadia extended support to the initiatives taken by the SNDP Yogam in agriculture.

#### Ryots ready for unfavourable kharif



Velchala Yellaiah, a farmer of Sirisingandla village in Toguta mandal of Medak district, is ready to cultivate his two acres farm with paddy, and nurseries are already made for it. The soil has also been tilled for cultivation and adequate seed and fertilizer was stocked. However, he has also been preparing an alternative plan in case there are no rains as predicted by the weatherman.

According to the Weather Department's forecast there might be scanty rainfall this year too for the second consecutive year.

In that case, Yellaiah is planning for maize and other ID crops, which need little water and less input cost. "The option remained with us in case of weak monsoon is to go for the alternative crops," he said.

With the rainfall in the past few days in the district, the administration is also gearing up for the kharif season.

There is a total of 7,15,825 hectares of cultivable land available in the district out of which normal area for cultivation has been set as 4,32,938 hectares. The administration has been expecting that about 5.39 lakh hectares of land may go for cultivation during the present season.

Paddy, maize and cotton are expected to take a major share in the cultivation with 1.04 lakh hectares, 1.45 lakh hectares and 1.56 lakh hectares respectively. During the last year, paddy was cultivated in 73,000 hectares followed by maize in 1.10 lakh hectares and

cotton in 1.33 lakh hectares. As the farming community is opting more for commercial crops, the area is slowly, but surely, increasing.

Coming to other crops, it was informed that jawar will be sown in 12,000 hectares, green gram in 26,000 hectares, black gram in 15,000, red gram in 31,000 and sugarcane in 26,000 would be taken up for cultivation by the farmers depending on the availability of water.

Similarly, the agriculture officials are also getting ready with required quantity of seed and fertilizer. Seed that are stocked included paddy (18,000 quintals), soya bean (15,000), maize (10,000), sunhemp (9,000), red gram (500), green gram (300) and black gram (200) are also kept ready to supply for farmers.

All this preparation was made based on the assessment than the normal rainfall may take place.

The officials stated that the famers would go for cultivation of pulses and maize, if there is drought-like condition in the district.

#### Summer rain, boon to livestock



Unseasonal rain during this summer has sustained the green cover on a large tract of grazing land in rural parts of the Tiruchi and Karur districts bringing cheer to the cattle rearers.

Besides the summer period of April and May, the period from June to September is considered as a dry period by those rearing cattle. It may extend up to the onset of northeast monsoon.

During this period, farmers find it difficult to feed cattle due to drying up of grazing area.

#### Poromboke land

They have to depend on open and poromboke lands, located close to waterways for grazing.

There were instances of cattle growers, who rear sheep and goats, moving to neighbouring areas in search of green pasture.

However, they have got a break from the practice during this year due to excellent rain in the summer months.

A large tract of land, which is yet to be ploughed for the next cropping season, looks green with the growth of grass.

Besides the delta irrigated areas including Musiri, Kulithalai, green pasture is seen in dry areas like Thuraiyur, Thogamalai, Ayyarmalai, Aravakurichi and others.

"The availability of green grass on grazing fields makes our job easy."

The cattle eat enough grass within four to five hours of grazing. It is unusual in the current season," said a farmer in Nangavaram.

In view of the possibility of opening of Mettur dam in the near future and onset of northeast monsoon, he said there would be no shortage of fodder until February 2016. Most of the farmers said the average yield of milk of milch animals had gone up due to healthy intake of food.

#### **Interaction with farmers**

Chief Minister K. Chandrasekhar Rao enquired about rainfall and sowings while interacting with farmers at Erravelli and Narsannapet in Medak district while travelling by road to Karimnagar on Wednesday evening. He also sought feedback from farmers about the availability of seed, fertilizers and pesticide, a release said. Mr. Rao told the Medak Collector Rahul Bojja and other officials present that the agricultural season started well with rains at the commencement of monsoon. He asked them to make arrangements to meet the requirements of farmers. The Chief Minister who visited Karimnagar for overnight stay will worship at the temple at Vemulawada with family members on Thursday.

#### 'Grow Gliricidia to increase soil fertility'

As agricultural production in Andhra Pradesh is being increasingly impacted by adverse weather, farmers are searching for ways to mitigate the loss. Lost in desperation, they are not realising that there is a widely available tree which enriches the soil fertility multifold with little human intervention and negligible investments.

Commonly known as 'fencing plant', it is known for many generations but the farming community has almost forgotten it under the belief that chemical fertilizers are a sure-shot solution to the problem poor soil quality. Scientifically known as Gliricidia Sepium, these trees add valuable nutrients such nitrogen, potassium and phosphorous to the soil thereby increasing its fertility many times more than any other nutrient can do.

It is a multipurpose legume tree that increases soil productivity and yields in addition to reducing soil erosion and control pollution associated with the use of chemical fertilizers.

The biggest advantage is sustainable agricultural productivity that Gliricidia brings. Natural Organic Farmers' Association treasurer Ch. R.K. Prasad told *The Hindu* that Gliricidia was a boon for farmers and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) recommends it time and again to farmers for achieving higher yields and contribute to environment but emphasis was more on use of chemical fertilizers, which was the trend in many countries.

#### Farm bunds

As the economy of Andhra Pradesh is heavily dependent on agriculture in the changed circumstances, the NOFA requested the government to motivate farmers and facilitate the growing of Gliricidia trees on farm bunds and borders of agricultural fields.

The results can be seen in a few months as the soil fertility goes up and no chemical fertilizer is a match to Gliricidia.

Also called 'live fencing tree', a Gliricidia tree grows anywhere. Farmers have to grow it to see its immense benefits as the ICRISAT had demonstrated.

The Agriculture Department is being asked to take necessary action so that the farmers can herald a potential revolution.

Commonly known as 'fencing plant', these trees add valuable nutrients such nitrogen, potassium and phosphorous to the soil

#### CM sets 3-year target for fisheries, animal husbandry

Chief Minister N. Chandrababu Naidu on Tuesday directed the officials to increase dairy, poultry and meat production by 20 per cent this year.

Emphasising the importance of animal husbandry as a growth engine of the primary sector at a review meeting, Mr. Naidu highlighted the potential of the department to provide employment to one crore people.

He set a three-year target to bring animal husbandry and fisheries on par with agriculture and horticulture departments.

Officials informed the Chief Minister about the plan to increase the department's revenue to Rs 44,241 crore from the current Rs 36,798 crore.

The Chief Minister said officials would be appreciated with incentives and awards.

Head of the Animal Husbandry Department, Kondala Rao informed the Chief Minister that they were able to increase milk production in Chittoor district by providing quality fodder for animals. They have allotted Rs 15 crore for this.

Stating that Uttar Pradesh, Rajasthan and Gujarat were leading in milk production, the Chief Minister directed officials to work towards positioning Andhra Pradesh among high milk producing states.

It has also been decided to hand over sheep farming units to women from SC, ST, BC, Minority and DWCRA groups. Sheep farming was also identified as a focus area. The Chief Minister also suggested the officials to explore setting up meat processing units. Principal Secretary (Animal Husbandry) Manmohan Singh, Vijaya Dairy Managing Director Ramana Murthy, AP State Skill Development Corporation, CEO Ganta Subba Rao and others were present.



#### More dal, less bhaat

Policymakers and consumers can rejoice in the light of the latest price data. Food inflation in particular has witnessed significant moderation.

In May 2015, food prices were up by only 2.3 per cent at wholesale and 5 per cent at retail levels over May last year. The increases in minimum support prices for the current season are also within 5 per cent for most commodities (paddy MSP at 3.7 per cent). This surely brings relief to policymakers combating close to double-digit food inflation just a year ago.

However, this should not lead to complacency on the food price front, as prices of essential commodities like pulses have increased by a whopping 23 per cent over the same period. Some pulses, especially urad and tur, increased by 30 per cent.



There have also been reports that the retail prices of urad and tur in select cities have increased by more than 50 per cent. All this has happened while India imported 4.6 million metric tonnes (MMT) of pulses in 2014-15 (FY15), up by 27 per cent over the previous year.

Dal-bhaat or dal-roti is considered to be a poor man's diet. But dal today seems to have become a luxury that only the better-off can afford. It is an important source of protein for vegetarians and is slipping away from the hands of the poor. Fearing that prices of pulses can flare-up further, the government has announced its intention to increase imports.

The problem is that urad and tur have limited international markets, and India sources it primarily from Myanmar, Tanzania, etc. The supplies in those countries cannot increase quickly, and thus prices are bound to rise. As a result, our pulse import bill, which was already \$2.8 billion in FY15, up 33 per cent from FY14, is likely to go up even more. Pulses in India are grown on about 25 million hectares (mha) of land, largely rain-fed, with only 16 per cent under irrigation.

Production hovers between 18-20 MMT. Pulses need much less water and are nitrogen fixing, so they do not need much chemical fertiliser. They can thus help save on large input subsidies (power, irrigation and fertiliser), much of which are normally cornered by rice, wheat and sugarcane, as these crops have high irrigation cover and higher fertiliser consumption.

What is the story about rice (bhaat)? May WPI for rice is down by 1.8 per cent. Interestingly, even in a drought like FY15, India exported 12 MMT of rice worth \$7.8 billion. In the last three years, India has consistently exported in FY15, 3.7 MMT was basmati and the remaining 8.3 MMT, non-basmati. In terms of value, basmati accounted for 57 per cent of total rice export earnings. India produced 101 MMT of rice from about 43 mha, almost 60 per cent of which is irrigated.

The key point in the case of rice is that it needs high doses of water for irrigation, roughly 3,000-5,000 litres per kg of rice, depending on where it is being grown. The father of Pusa basmati, V.P. Singh, tells us that Pusa-1509 consumes about one-third less water than non-basmati, and that the consumptive use of water in rice is much less, just 12-15 per cent. But 30-40 per cent of irrigation water is lost through evaporation and roughly half goes back to groundwater with much higher nitrate content, polluting potable water.

This percolated water has to be lifted time and again through highly subsidised power. The point to consider from the policy perspective is that part of the export competitiveness of rice (10-15 per cent) comes from these large subsidies. Also, there is a government system of procurement of paddy/ rice, which reduces risk for rice farmers. Pulses, by contrast, neither have any such government system of procurement, nor benefit from large input subsidies. Most are banned/ restricted from exports, and imports are allowed at zero duty, while rice imports attract 70 per cent duty.

This seems to be a comedy of errors. What is the policy correction needed so rice and pulses get equal and fair treatment in terms of incentives to farmers? Crop-neutral incentive structures are the need of the hour. At present, incentives are skewed in favour of rice, wheat and sugarcane, and consequently, the nation is overloaded with their stocks. Policies need to be tweaked to bring incentives for pulses at par with, say, rice.

To do this, first, the rice import duty needs to be slashed to 5-10 per cent, if not zero, so that the rice trade is truly open at both ends. Second, direct buying of pulses from farmer groups needs to be encouraged by private-sector organised industry/ retail groups, or by a wing within the FCI, and through warehouse receipt systems. This is to give farmers a higher share of the consumer's rupee as an incentive to produce more pulses.

Third, although good technology will increase yields of pulses in due course, in the short to medium run, bringing more pulses' area under irrigation can help stabilise their yields at a reasonably satisfactory level. For this to happen, policy must reward those ready to shift to pulses, especially in the Punjab-Haryana belt, where the water table is fast depleting. High-end technology, such as digitised land records, satellite/ drone images of changing cropping patterns and Aadhaar-linked accounts, can be used to ensure that these rewards go only to those who grow pulses.



#### Google Maps new tool to resolve land conversion disputes

Revenue officials are increasingly relying on Google Maps to settle land disputes that come under the ambit of the Paddy Land and Wetland Act.

The Act prohibits all construction activity on land which was used for paddy cultivation as on August 12, 2008. A house cannot be built on a plot surrounded by paddy fields and it should not affect adversely the cultivation of paddy in the area.

The Act was a result of campaigns against indiscriminate conversion of paddy fields. But the Act has its flip side too. Complaints have arisen that provisions of the Act are misused by civic bodies such as panchayats and municipalities empowered to give such sanctions to scupper applications for construction of a house or a public utility over land converted much earlier than when the Act came into effect.

The revenue department usually refers hand-drawn sketches to decide on applications for building houses or any other structure on converted land.

Mohammed Ali, revenue divisional officer, Thrissur, says the Google Earth Map which has data on land pattern since 2002, is the way forward in resolving such issues.

"Earlier when an application for building a structure over a converted land came up, agricultural or village officers were told 'to inspect and report'. Now using demarcated satellite map and GPS coordinates of the plot we search the Google Earth Map to identify the current status of the land and its pattern of use in 2008," says the Thrissur RDO.

Ali said over the last one year he has been encouraging agricultural and village officers reporting to him 85 of them to use satellite maps.

He, however, said Google Maps may not be supportive in extremely disputed applications for land conversion since it is not an Indian source. "In such cases we will have to get maps from agencies like the National Remote Sensing Agency, Cartosat or Insat, and the Google map can be used as corroborative evidence," he added.

#### Highest no. of small & medium projects, but lowest water stock

Marathwada, which has the second largest storage capacity in dams after the Pune region, has left with the lowest water storage of 5% across all regions of the state on Tuesday.

The large, medium and small dams in Marathwada have a collective storage capacity of 7,603 million cubic metres of water. This capacity is next to the Pune region having a collective capacity of 10,266 mcm. Currently, the dams in Pune region have 17% water storage, an official release said.

Marathwada has the highest number of 75 medium dams in the state. The water storage in these reservoirs has been dipped to 6%, the lowest compared to other regions of the state. The Konkan region with five medium projects has the highest storage (33%) in such

reservoirs. Nagpur region, which covers parts of Vidarbha, has around 40 medium projects with a cumulative storage of 8%.

Marathwada also has 720 small dams, the highest compared to other regions. The water level in these small dams too has dipped to a worrisome 3%, lowest in the state by Tuesday.

An irrigation department official said relatively lower annual rainfall was one of the key reasons behind dams in Marathwada getting exhausted earlier as compared to reservoirs in other regions.

"The Marathwada region, comprising of eight districts, receives relatively lower annual rainfall compared to other regions of the state. On the other hand, there is increasing demand for water from agriculture, industry and domestic sector in the region. Combined effect of these factors results in larger depletion of dam water levels in Marathwada," the official said.

He also highlighted the fact that the region was facing drought-like situation for the last two years, which also has affected storage.

A fresh El Nino forecast by India Meteorological Department (IMD) has indicated El Nino getting stronger in July, August and September and affecting rainfall during monsoon. This forecast is in tandem with IMD's earlier prediction of a deficient rainfall this monsoon season. "The forecast of a deficient rainfall seems more plausible now with the increasing probability of a stronger El Nino," said an expert from IMD.

The probability of a strong El Nino seems to be increasing from 12% to 62% during July, August and September this year. The report said chances of a moderate El Nino seemed higher during June, July and August—at 88%.

#### 'Rain tree infections to worsen in monsoon'

A team of scientists that recently inspected and diagnosed the infested rain trees in Mumbai have submitted their report to the BMC's garden superintendent.

While the report confirms the BMC's claim that the rain trees were indeed infested by mealy bug, it also states that the trees are under attack from a branch-drying disease, which worsens in monsoon.

The team of scientists from College of Agriculture in Dapoli, Ratnagiri, visited Mumbai in March and was accompanied by BMC officials during the inspection.

As per Tree Census 2008, most of the trees in Mumbai are over 30 to 40 years old. Old trees are prone to pest attacks, said the BMC. Several rain trees, claim the authorities,

have been attacked by the mealy bugs since 2010 and many along the roads are on the verge of dying.

According to BMC statistics, of the 500 pest-infested trees in seven zones from south Mumbai to Dahisar, 272 were cured. However, activists rubbished the civic body's claim and said that the number of infested trees was higher.

In a letter to the BMC garden superintendent on May 28, the associate dean of the College of Agriculture in Dapoli had said the infection could be exacerbated during the rainy season as it is a favourable climate for the bug and hence, timely spraying of fungicide was essential.

He also said that the branch drying disease too would worsen in monsoon and that insecticides and fungicides would have to be added with an adhesive so that chemicals were not washed away by the rains.

Leena Prabhoo, chairperson of the NGO 'Improving Quality of Life in Mumbai Suburbs' said that the dying of rain trees was tragic as well as alarming. Prabhoo and her team had tried to save a few infested rain trees by applying neem paste.

However, they had limited success. "We applied neem paste to the infested rain trees in Santacruz (E). While 47 trees could not be saved, 53 trees that were once infested, are now flourishing. Apparently, the problem is greater in suburbs like Vile Parle, Santacruz, Andheri and Goregoan as compared to the island city area. The BMC needs to work on a war-footing," said Prabhoo.

#### ICAR team to finalize site for horti institute

Taking the first step to implement the proposal of establishing a Post Graduate Institute of Horticulture Research and Education, a team of the Indian Council for Agricultural Research (ICAR) shall arrive in Amritsar on Thursday to finalize the project site.

The announcement of the project was made by the finance minister Arun Jaitley in the Union budget in Lok Sabha. An ICAR team, accompanied by state agriculture commissioner, secretary (agriculture), and senior officials of horticulture department, would be visiting various locations in the district to find suitable land for the institute, Amritsar deputy director of horticulture Baaj Singh told TOI on Wednesday

ICAR is an apex body for coordinating, guiding and managing research and education in agriculture, including horticulture, fisheries, and animal sciences, in the country and runs 71 agriculture universities across India.

Sources seeking anonymity said that the most suitable spot being considered is the mixed fruit orchard at Attari, near the international border.

Baaj said that Attari orchard was one option but the team would also visit several other locations. "They would want to have a building near the city also and land nearby for research purpose," he added.

Meanwhile, Attari mixed fruit orchard in-charge Jatinder Singh said that after cutting the mango trees, they had planted more than 1,300 plants of peach, plum, and pear.

He said that they had set up hi-tech fruit and vegetable nurseries to supply plant saplings to the farmers across the country.

#### Cotton, paddy, pulses support price hiked

The Cabinet Committee on Economic Affairs chaired by the prime minister Narendra Modi on Wednesday hiked minimum support price (MSPs) for Kharif crops of cotton, paddy and pulses. The hike, albeit small for the main cash crops of Vidarbha - cotton and paddy - at Rs50 per quintal, is modest Rs275 (including Rs200 bonus) in case of Tur and Urad. Soyabean gets only Rs40 more compared to last season.

Expectedly, farm leaders of the region were not enthused and said it was too little to bring cheer to farmers who are reeling under heavy losses in last kharif as well rabi seasons because of a weak monsoon followed by unseasonal rains and hailstorm. The hike is based on recommendations of Commission for Agricultural Costs and Prices (CACP) for kharif marketing season 2015-16 and will take effect from October 1.

The CACP takes into account the cost of production, overall demand-supply, domestic and international prices, intercrop price parity, terms of trade between agricultural and non-agricultural sectors, the likely effect on the rest of economy, besides ensuring rational utilization of resources like land and water, while recommending MSPs.

In view of a large surplus of cereals in contrast with huge deficit in pulses, the cabinet made an exception and decided to give a bonus of Rs 200/- per quintal for pulses over and above the recommendations of the CACP. This is expected to give a strong price signal to farmers to increase acreage and productivity of pulses.

"The Modi government is just carbon copy of the earlier Congress regime. MSP hike is ritualistic, not looking to the farmers' condition," said farm leader Vijay Jawandhiya. Hike on tur, moong, urad does not make any sense as their market prices are double the

MSP, he added. "At least the government should protect farmers' interest by imposing import duty on pulses like it is done on sugar," said the leaders.

Kishor Tiwari of Vidarbha Jan Andolan Samiti also said it was disappointing. "Modi had said in his election campaign that farmers would be paid input costs plus 50%. This promise has not been fulfilled," said Tiwari who too found the hike too meagre.

State cotton federation chairman N P Hirani also found nothing to bring relief to farmers in the government's new MSPs. "Cotton prices should have been hiked at least by Rs500. The hike of Rs50 to take it to Rs4100 for best quality would not remove farmers' stress," said Hirani. He said Rs100 reduction in Bt cotton seeds prices was also yet to be passed on to farmers. New paddy MSP is Rs 1410, that of tur Rs 4625 (including Rs200 bonus) and moong Rs 4850.

#### Israel's consul general meets GCCI members

Israel's consul general in Mumbai, David Akov, said that agricultural technology, startup companies, eco-tourism and cultural events will help strengthen ties between the two countries

Akov had an interaction with Goa chamber of commerce and industry (GCCI) members in Panaji on Tuesday, where he spoke of dairy farming, vegetable and fruit cultivation, poultry and organic farming as areas of interest, from which Goa can benefit.

Akov was invited to Goa by the speaker of Goa legislative assembly Rajendra Arlekar when the two met in Mumbai

Present at the conference were GCCI president Narayan Bandekar, vice-presdients Sandip Bhandare and Manoj Caculo, chairman of tourism committee Gaurish M Dhond, treasurer Pratima Dhond, secretary Ralph de Souza and past president of Manguirish N Pai Raiker.

During Akov's previous visit to Goa in 2014, he visited the state government-run farms alongside then chief minister Manohar Parrikar and identified a few areas of interest. Speaking to mediapersons on the sidelines of the interaction, he said that this time around too, he would like to follow up on the same.

Replying to questions from the media later, Akov stated that around 40,000 tourists from Israel annually visit India and most come to Goa. The conference was addressed by Sandip Bhandare, after a brief introduction by Arlekar..

#### Hike in MSP of pulses okayed

In its bid to incentivize more cultivation of pulses, the Cabinet on Wednesday decided to sharply increase the minimum support price (MSP) for pulses by up to Rs 275 per quintal for 2015-16 while prices for paddy were increased by Rs 50. The hike in MSP for tur (arhar), moong and urad includes Rs 200 bonus per quintal over and above the increase in respective pulses.

"The Commission for Agriculture Costs and Prices (CACP) being the expert body on crop pricing, its recommendations are generally accepted as such. However, in view of a large surplus of cereals in contrast to huge deficit of pulses, the Cabinet made an exception and decided to give a bonus of Rs 200 per quintal for pulses over and above the recommendations of the CACP," a government statement said.

The prices would be effective from October.

India largely depends on import of pulses every year since domestic production does not meet the requirement. On an average India has been importing four million tonnes of pulses and this year it's likely to be five million tonnes due to reduction in production.

Sources said that the need to increase MSP for pulses had come up for discussion at the Committee of Secretaries (CoS) meeting last week. Chief economic adviser Arvind Subramanian had proposed this in order to boost domestic production as a part of the long-term plan to reduce the demand supply gap of the key kitchen item.

Agriculture minister Radha Mohan Singh said after inclusion of bonus, the MSP of tur and urad has been fixed at Rs 4,625 per quintal each for 2015-16, which is higher by Rs 275 per quintal from the last year. Similarly, the MSP of moong has been hiked by Rs 250 to Rs 4,850 per quintal for this year from Rs 4,600 per quintal in the 2014-15 kharif season.

That apart, the Cabinet directed that a credible procurement mechanism for pulses and oilseeds be put in place if the need arises. The Cabinet also approved minor increase in the MSP for other farm products including jowar, maize, sunflower seed and cotton.

In yet another decision, the Narendra Modi-led Cabinet decided to include Uttarakhand, Jharkhand and Chhattisgarh in the list of states to be covered under the National Dairy Plan-I (NDP-I) to increase milk production. The plan was approved for implementation

in 14 milk potential states with a total outlay of Rs 2,242 crore for six years from 2011-12 to 2016-17.

The Cabinet also gave its approval for continuation, strengthening and establishment of Krishi Vigyan Kendras with an outlay of Rs 3,900 crore. The scheme envisages continuation of 642 KVKs established till date and establishment of 109 new such centres in the 12th Plan.

#### Spurious seeds haunt Mahbubnagar farmers

The spectre of spurious seeds is once again haunting cotton farmers in Mahbubnagar district in the run up to the kharif season this year. In the past three weeks, authorities have seized a little more than 300 quintal of spurious BT cotton seeds, identical to good quality seeds of different companies. The estimated market value of the seized seeds is said to be about Rs 15 crore and would have been sufficient to plant cotton crop in as much as 11,222 hectares.

The latest instance of seizure of three quintals of spurious seed occurred in Maralbeedu village of Dharur mandal in the district on Tuesday during a raid by agriculture department officials, assisted by the local police.

"Acting on a tip-off, we raided a house in the village and discovered a large quantity of cotton seeds bags. After inspection, it was found that the seeds were being repacked resembling Kaveri brand along with certification labels," Dharur sub-inspector of police Amjad Ali told TOI.

The police official also said that a few quintals of the spurious seed were already distributed to dealers and that they were in the process of tracing the buyers.

In three earlier raids in the district including two at Badepally and Gattu villages, vigilance and enforcement authorities and the police seized as much as 300 quintals of spurious cotton seeds either repacked as branded BT cotton seeds or being prepared for repacking.

With huge demand for BT cotton seed that sells anywhere between Rs 650 to Rs 950 for a 450 gm bag of good quality seed, it is not unusual for dealers to dupe farmers by selling spurious seed. On an average, a farmer requires five to six bags of seed per hectare and spurious seed manufacturing companies offer the bags at a much lower price to dealers. The dealers in turn make great profit margins when they sell the seeds at market price.

M Kishanrao, a farmer cultivating BT cotton in his four acres in Pedda Adirala village for the past six years, said that twice in the past his crop output suffered after buying spurious seeds and he reported this to the dealer but to no avail. "If the seed is genuine, then a farmer can earn an average of one lakh rupees for five acre of cotton crop," he said. Spurious BT cotton seed menace in the district is also said to be the reason behind nearly 80 farmers committing suicide in the last one year following huge losses as a result of low yield, a typical outcome of planting such seeds.

Joint director of agriculture, K Usha, told TOI that teams have been formed to trace manufacturing units of spurious seeds and for keeping a vigil on the seed dealers. She admitted that the issue of spurious BT cotton seeds was a serious one in the district. She said that after any seizure, samples are sent to a laboratory in Hyderabad to verify their quality. "In most cases, we found that the seeds were dipped in colour to resemble the quality ones," she said.

# BusinessLine

#### Turmeric pales on slack buying



Spot turmeric prices decreased at Erode markets due to poor demand from North India. "Despite a poor arrival of 3,500 bags, the traders procured fifty per cent stocks at a lower price due to very poor upcountry demand. We are expecting the upcountry demand

to pick up only in August," said RKV Ravishankar, President, Erode Turmeric Merchants Association.

At the Erode Turmeric Merchants Association sales yard, the finger turmeric was sold at 4,698-7,509 a quintal; the root variety 4,369-7,088. Of the arrival of 1,013 bags, 410 were sold.

At the Regulated Market Committee, the finger turmeric traded at 6,098-7,599; the root variety 6,009-7,170. Of the arrival of 333 bags, 263 were traded.

At the Erode Cooperative Marketing Society, the finger turmeric fetched 6,039-7,011; the root variety 5,969-6,869. Of the 757 bags on offer, 452 were sold.

#### Bonus, high prices likely to spur pulses acreage

The Centre today hiked the minimum support price (MSP) of a range of pulses between 50 and 75/quintal with an additional bonus of 200, while also increasing the procurement price of paddy, the main Kharif crop, by 50/quintal.

In percentage terms, however, the increases continue to be miles away from the BJP's promise of providing farmers with a procurement price that ensures a 50 per cent profit over the cost of production.

The MSP is the minimum price at which produce is procured by Food Corporation of India (FCI) and other State agencies.

The Cabinet Committee on Economic Affairs (CCEA) – on the recommendation of the Commission for Agricultural Costs and Prices – gave its assent to raising the MSP for paddy by 3.7 per cent to 1,410. The price of superior grade paddy was up 50 or 3.6 per cent to 1,450/quintal.

Procurement prices for arhar (tur), moong and urad dals were raised by 6.3 per cent, 5.43 per cent and 6.3 per cent to 4,625, 4,850 and 4,625 respectively. The new rates will be applicable from October 2015.

"This (increase in pulses MSP) is expected to give a strong price signal to farmers to increase acreage and invest for increase in productivity of pulses...Last week, a decision to import pulses was taken. These measures are expected to complement efforts to keep a check on the price rise in pulses," said an official statement.

|                        | 2014-15 | 2015-16 |
|------------------------|---------|---------|
| Paddy (Common)         | 1,360   | 1,410   |
| Paddy (Grade A)        | 1,400   | 1,450   |
| Jowar Hybrid           | 1,530   | 1,570   |
| Jowar Maldandi         | 1,550   | 1,590   |
| Bajra                  | 1,250   | 1,275   |
| Ragi                   | 1,550   | 1,650   |
| Maize                  | 1,310   | 1,325   |
| Tur (Arhar)            | 4,350   | 4,625*  |
| Moong                  | 4,600   | 4,850*  |
| Urad                   | 4,350   | 4,625*  |
| Groundnut              | 4,000   | 4,030   |
| Sunflower seed         | 3,750   | 3,800   |
| Soyabean (black)       | 2,500   |         |
| Soyabean (Yellow)      | 2,560   | 2,600   |
| Sesamum                | 4,600   | 4,700   |
| Nigerseed              | 3,600   | 3,650   |
| Cotton (medium staple) | 3,750   | 3,800   |
| Cotton (long staple)   | 4,050   | 4,100   |

<sup>\*</sup> includes bonus of ₹200 per quintal for 2015-16

#### **Bullish price trend**

Wholesale prices of the three pulses in New Delhi as of this week is 10,000, 8,600 and 9,800, respectively, according to Consumer Affairs Ministry data. In retail price terms, urad is selling at 112/kg from 72 a year ago; moong is at 103 (97), and arhar is being quoted at 113 (72).

The price rise is mainly attributed to supply constraints with an estimated 25-30 per cent of the Rabi crop damaged due to unseasonal rain while arhar and urad have also seen output drops in Myanmar, a major exporter of pulses.

"It's interesting to see the government taking note of the drop in pulses output and also consumption per capita over the last 20 years. A bonus has never happened in the history of pulses so it is encouraging," said Pravin Dongre, Chairman, Indian Pulses and Grains Association.

He added that current prices are likely to remain firm till November when the crop from Canada, Australia and Myanmar will hit the Indian market.

Experts said while the Centre's move was in the right direction, until its capabilities to store pulses and establish effective distribution channels were enhanced, it would do little to spur production or help keep prices in check.

"The MSP increases are marginal, the effect will only be on paddy which is procured by the Centre. Pulses are not procured at present since capabilities are limited given the short shelf life of pulses," said Tejinder Narang, a grains trade analyst.

#### Acreage may rise

The Centre's move should see increased pulses acreage by as much as 10 per cent this Kharif at the expense of cotton and soyabean, given the prevailing returns and assured prices.

"The bonus formula has worked well earlier, for example, in Madhya Pradesh for wheat. Efforts to procure pulses earlier through NAFED had not been successful. The Government needs to develop warehouses and processing facilities for pulses," said NP Singh, Director, Indian Institute of Pulses Research, Kanpur.

#### **Growers unhappy**

However, the farmers are not happy with the MSP and bonus announcements.

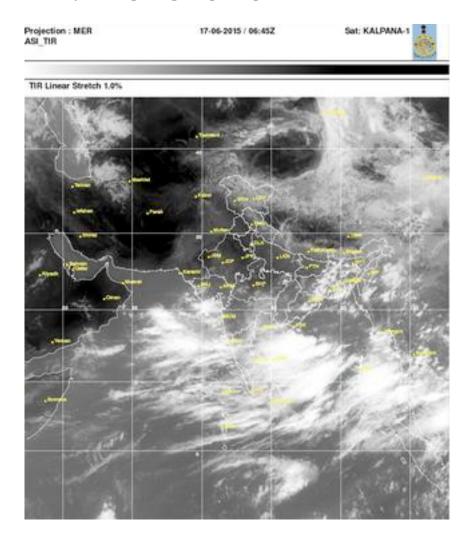
The All India Kisan Sabha alleged that it did not even cover the cost of production. "...despite the much-hyped 200/quintal bonus for pulses, the cost of production of moong was 4,970.77 while the MSP including bonus is 4,850," it said in a note.

Basavaraj Ingin, President of Karnataka Tur Growers Association, said the government has deliberately neglected the factual position of demand-supply, market price of previous years – both domestic and international – and also the forecast of deficit rainfall, while announcing the MSP and bonus.

Including the bonus, the support price announced does not even cover the production costs, pegged at 5,000 for tur.

"The bonus is just an eye wash. We demand the government to reconsider and fix the MSP for tur at 6,500. In addition, we demand that the government levy import duty of 30 per cent on pulses if interested in protecting the farmers' livelihood," Ingin added.

'Low' forms in Bay of Bengal; signals pick-up in monsoon



True to forecasts, a low-pressure area has formed over the west-central Bay of Bengal off the north Andhra Pradesh and south Odisha coasts this morning.

The 'low' makes monsoon flows to converge around it and carries the rain as it crosses the coast and tracks over land.

#### Trough over land

The 'low' has also opened up the all-important land-based trough from northwest Rajasthan and connecting with it.

The trough makes a custom-made path for the 'low' to mover land.

(This is distinct from the other offshore trough along the West Coast, which is crucial in terms of holding the Arabian Sea arm of the monsoon in good stead.

Today, it lay extended from south Gujarat coast to north Kerala).

The India Met Department said the land-based trough cuts through Madhya Pradesh, Chhattisgarh and Odisha.

The 'low' will bring moderate to heavy rain to all these regions and the surroundings as it moves over land.

#### Rain alert

This will expectedly provide for the base phase of the monsoon yet for central and east India during the ongoing season.

The Met Department has sounded a heavy rain warning over coastal Andhra Pradesh and Telangana. Heavy rain for Assam, Meghalaya, Saurashtra, Kutch, Konkan, Goa, coastal Karnataka, south interior Karnataka and Kerala.

#### Selling pressure dissolves sugar



Sugar prices continued to slide for tenth consecutive day as producers kept on selling at lower rates to ease stocks. Mills sold the commodity at a 20-40 a quintal discount which pulled down the prices by 20-25. *Naka* rates were steady at lower level. Vashi market currently carries about 110-115 truck loads keeping stockists at bay.

Arrivals at Vashi market remained stable at 57-58 truck loads and local dispatches were about 56-57 loads. On Tuesday evening, about 18-20 mills offered tenders and sold about 44,000-45,000 bags at 2,105-2,250 (2,125-2,290) for S-grade and 2,225-2,380 (2,225-2,420) for M-grade.

The Bombay Sugar Merchants Association's spot rates: S-grade 2,246-2,471 (2,252-2,491) and M-grade 2,380-2,652 (2,402-2,652). *Naka* delivery rates: S-grade 2,210-2,280 (2,210-2,280) and M-grade 2,350-2,550 (2,410-2,550).

#### Low-cost home plan, higher MSP for paddy, pulses top Cabinet decisions

The Centre took a number of key decisions on Wednesday, including raising the minimum support price for a range of pulses and approving a 'Housing for all by 2022' scheme.

The Cabinet Committee on Economic Affairs on Wednesday hiked the minimum support price (MSP) for a range of pulses between Rs. 50 a quintal and Rs. 75 a quintal with an additional bonus of Rs. 200 a quintal. Along with this, the government also increased the procurement price of paddy, the main Kharif crop, by Rs. 50 a quintal.

#### **Promise unfulfilled**

The hike was on the recommendation of the Commission for Agricultural Costs and Prices, but falls short of the BJP's promise of providing farmers with an MSP that covers the cost of production plus 50 per cent profit.

Procurement prices for arhar/tur, moong and urad dals have been raised by 6.3 per cent, 5.43 per cent and 6.3 per cent to Rs. 4,625, Rs. 4,850 and Rs. 4,625 a quintal, respectively.

In another decision, the Cabinet approved the launch of a 'Housing for All by 2022' scheme for urban areas under which central assistance in the range of Rs. 1 lakh to Rs. 2.3 lakh per beneficiary will be provided based on the category of the scheme.

For loans, the income ceiling defining economically weaker sections has been revised to Rs. 3 lakh per annum from Rs. 1 lakh earlier and the ceiling for the low income group has been hiked to Rs. 6 lakh per annum from the earlier Rs. 3 lakh. The changes will bring more people under the beneficiary bracket. The Cabinet also gave its approval for ramping up India's solar power capacity target under the Jawaharlal Nehru National Solar mission five-fold to 100 GW by 2022, while the CCEA approved setting up of over 2,000 MW of grid connected solar power projects on a build, own and operate basis by developers with viability gap funding.

#### Jayalalithaa inaugurates agri projects worth Rs. 70 cr

Tamil Nadu Chief Minister also donates 29 jeeps, opens centre for farmers



Tamil Nadu Chief Minister J Jayalalithaa launched projects related to agriculture infrastructure and services totalling over Rs. 70 crore on Wednesday.

According to an official press release, the Chief Minister inaugurated cold storage facility with the capacity of 1,000 tonnes, six modern storage warehouses worth Rs. 7.2 crore, in various districts — Tirunelveli, Cuddalore, Coimbatore, Nilagiri, Pudukottai — through video conferencing.

#### Other projects

In addition, the Chief Minister donated 29 jeeps and opened a complex for tender-coconut trade, Agmark laboratories for quality certification, butterfly parks and tea parks, and a centre for farmers.

The press release said that with the additional six pesticide laboratories that was recently set up in few districts — Erode, Salem, Vellore, Trichy, Cuddalore and Madurai — Tamil Nadu has become a pioneer in the field having a total of 15 labs out of 68 present in India.

## **Business Standard**

Govt to soon appoint consultant for common agri-market project



As a first step towards setting up a common national market by integrating <u>Agricultural Produce</u> Market Committees (APMC) across the country, the central government is looking to appoint a consultant to draw a roadmap for the project, followed by bids for providing software and technology.

The Small Farmers' Agricultural Consortium (SFAC) has already invited bids for appointing a consultant and bids for this will be opened next Monday. Strategic advisory wings of some banks that have a large agri-financing business, similar subsidiaries of agri-marketing institutions and management consultancy firms have applied for the project, said sources close to development.

On July 10, state agriculture ministers will meet in Hubli in Karnataka where the new technology that integrated APMCs in the state – which has integrated more than 50 APMCS on a single e-platform – will be demonstrated.

The move is in line with Prime Minister Narendra Modi's aim of forming a national common market for agricultural produce.

The consultants will draw up a roadmap for agri-marketing reforms along the lines of government directives, while the nodal agency will be SFAC. As in the case of vegetables and fruit *mandi* set up by it near New Delhi, state-level common agricultural markets are most likely to be developed along the same lines.

The consultants will finalise terms for software and technology providers unless government decides to develop such markets on PPP model where project partners will also be selected.

Sources said that bids for providing software may be invited in a month's time, if the rest of the process goes off smoothly.

This software will be made available to states who will give a single license and where *mandis* can be integrated for trading in line with Karnataka model.

In Karnataka, 51 APMCs have been integrated and a common trading platform has been developed which allows farmers to sell their produce to whoever gives them the best price. The project is a 50:50 joint venture between state of Karnataka and NCDEX emarket, a wholly-owned subsidiary of agri-commodity derivative exchange NCDEX.