

Karnal farmers get climate-smart

They're back to growing maize due to drop in groundwater level



Farmers in the villages of Karnal, Haryana, are experimenting with maize cultivation along with wheat.— Photo: Meena Menon

Basmati farmers in Karnal district in Haryana are going back to what their forefathers did before the Green Revolution — growing maize. While it is the new varieties and not the old hardy ones, maize offers an option in view of the plummeting groundwater levels and climate vagaries in the area. In Birnarayana village in Nilokheri block, Inderjit Singh has been planting maize for the last three years but has reduced the area from six to one acre. “There is no market for maize and the price is low. The minimum support price is around Rs.1,350,” he says. His father grew maize and cotton many years ago but maize is looked down upon. “In the olden days, we considered it bad to marry into families which grew maize,” he laughs. He plants an acre of maize as an experiment. The price for basmati and wheat is much higher, but he admits that maize is a “tension-free” crop with fewer pests. Maize has a low price compared to rice and wheat but could prove an option in the long run. This village is one of the 27 climate-smart villages in Karnal, part of a project by the Consultative Group on International Agricultural Research programme on Climate Change, Agriculture and Food Security that aims to improve farmers’ income and resilience to climate risks. Researchers, local partners, farmers and policy-makers collaborate to select interventions to enhance productivity, increase income, achieve climate resilience and enable climate mitigation.

Similar Bihar venture

While in Karnal the programme involves large landholders, in Bihar a similar venture has roped in subsistence farmers in 26 villages in Vaishali and Muzaffarnagar districts. India is one of the 18 countries in the world which is using climate-smart technologies. The area under maize has almost doubled in Haryana in the last few years with farmers growing it from February to June. The government of Haryana supported diversifying into maize and it has endorsed climate-smart villages in its agriculture policy. In Taraori, a major basmati-growing area and one of the four pilot sites in South Asia on climate-smart villages, 900 acres are under climate-smart practices of the 2400 acres here. Manoj Kumar Munjal of the Society for Conservation

of Natural Resources and Empowerment of Rural Youth, says groundwater levels are falling by a metre a year in these parts. Maize could have more uses in the future and the demand could increase. Farmers get the latest weather information on their mobile phones and they are encouraged to adopt practices like laser land levelling or using computer systems to make sure land is even so that it can be watered optimally, says Dr. M.L. Jat, agronomist at the International Maize and Wheat Improvement Centre.

Water release ordered

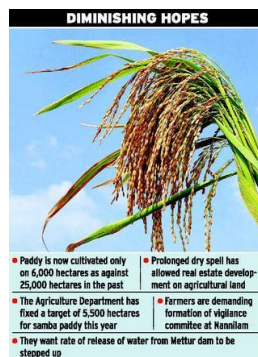
Chief Minister Jayalalithaa on Wednesday ordered the release of water from the Vaigai dam for irrigating 45,041 acres of land in Vadipatti and Madurai north taluks and Nilakottai taluk of the Dindigul district from Friday, says an official release.

Panel to recommend names for TANUVAS V-C post

The State government has constituted a committee to recommend three names for the post of Vice-Chancellor of the Tamil Nadu Veterinary and Animal Sciences University, which has been lying vacant for nearly one year. The committee includes N. Balaraman, former Vice-Chancellor of the university; A.M. Shanmugam; and N. Natarajan, former Dean, Madras Veterinary College. Dr. Balaraman will be the convener, according to an official release issued on Wednesday.

Karaikal farmers wait for water

They had to skip kuruvai crop for several years



Farmers in different parts of Karaikal, the tail end area of the delta basin, are worried over the delay in the arrival of Cauvery water to take up agricultural operation.

Although water from Mettur dam was released on August 10, it takes 45 days to reach Karaikal. Gone are the days when farmers raised paddy crops on over 25,000 hectares of land, but now they were able to raise paddy only on over 6,000 hectares, said Karaikal District Farmers' Association president P. Thandawasamy. Once known as the granary of Puducherry, Karaikal had now turned a haven for real estate promoters. The area under paddy cultivation in Karaikal district was decreasing day by day and farmers were forced to give their fertile land to throw away price because of lack of water and monsoon failure. Owing to the lack of water most of the farmers were forced to skip kuruvai cultivation for the last several years. Nearly 9.45 tmcft. of water is required for irrigation. However, there is lack of co-ordination among Karnataka,

Tamil Nadu and Puducherry, and farmers had been suffering because of this for several years, farmers complain. "Karnataka takes a rigid stand on the release of Cauvery water to Tamil Nadu, which too takes a similar stand with respect to farmers of Karaikal district," said Mr. Thandavasamy. There were seven rivers namely Pravadiyaru, Thirumadairayan river, Arasalaru, Nattar, Nandalar, Vanchiyar and Noolar that flow towards the tail end region before joining the sea at Karaikal. With the storage comfortable at Mettur, the district administration should step up the release of water for the benefit of farmers to complete the agriculture operations by the end of this month. The farmers here have demanded constitution of a vigilance committee at Nannilam, to monitor release of adequate quantum of Cauvery water to Karaikal district. The district administration has built tail end barrage across rivers to store rainwater during monsoon and prevent excess water from flowing into the sea. The district administration should take steps to dredge water bodies and rivers, farmers could store more quantum of water for irrigation purpose during monsoon failure, said C. Vincent, Communist Party of India Karaikal district secretary. The Agriculture Department has fixed the target of raising paddy crop on over 5,500 hectares in the samba season. The department has adequate certified seeds, pesticides, and fertilizers. Farmers who have raised kuruvai crops with the help of borewells on over 600 hectares have started harvesting the crop, according to department sources.

Water release: farmers happy

Water to be made available for 120 days from September 5 to benefit 45,041 acres



The announcement of water release from the Vaigai reservoir for irrigation on September 5 has been hailed by ryots across Madurai and Dindigul districts on Wednesday. With the storage level crossing the 50-foot mark two days ago, farmers were optimistic that they could start preliminary work for their crop on 45,041 acres spread over Madurai and adjoining Dindigul districts. According to officials in the Department of Agriculture, the total target area to be brought under paddy cultivation for Madurai district is 65,000 hectares, including samba and thaladi, from Peranai to Melur, Tirumangalam Main Canal ayacut and Periyar extension ayacut (up to Singampunari). Now, a little over 40,000 hectares will be covered by the single crop. In the event of a promising north-east monsoon, an additional 8,000 hectares along the Tirumangalam Main Canal may also benefit, by which the total cultivable area for the single crop may go up. "This is possible as the catchment areas of Periyar reservoir are getting steady rainfall and this will enable uninterrupted water release for farmers," said Arulprakasam, a progressive farmer in Melur, near here. Further, the sustained rainfall may augment storage in small and big tanks, including the Nilayur tank, Thenkal tank, Madakulam tank and Pattinam dam in Kottampatti block. This would enable farmers relying on tank and well-fed irrigation to sustain their crop this

season, agriculture department officials said. The PWD engineers said that water for irrigation would be made available for 120 days, beginning September 5. This is expected to bring in new hope among small and marginal farmers, who relied on the dam water, as well. But the water release for irrigation would in no way affect the drinking water availability for Madurai city in the Vaigai reservoir, a Corporation official asserted.

Solar-powered IP sets for 1,825 SC, ST farmers

As many as 1,825 farmers from the Scheduled Caste and Scheduled Tribe communities will now get solar-powered irrigation pump-sets for borewells as the Minor Irrigation Department has added the green energy quotient to its welfare scheme for Dalit farmers. Minor Irrigation Minister Shivaraj S. Tangadadi, who disclosed this to reporters here on Wednesday, said tenders had been finalised for supplying solar-powered IP sets to the beneficiaries. While the government would drill the borewells, the company that has bagged the contract would install the pump-sets. The cost of installing each such pump-set with a capacity of 5 HP had been pegged at Rs. 7.6 lakh in northern districts and Rs. 5.6 lakh in the southern districts, he said. About 30 per cent of the project cost would be subsidised by the Centre to encourage tapping of green energy, he said. Defending the huge initial cost involved, he said normally the government had been spending nearly Rs. 10 lakh for each Dalit farmer for providing supporting electrical infrastructure such as power lines and poles for getting supply from the power utility. The beneficiaries were also being made to wait for their turn for energising their IP sets, he said. However, the new initiative would help farmers to get instant power supply instead of depending upon the power utilities. Similarly, power utilities will not face the financial burden of supplying free power to farmers, he said.

Papaya is their lucky charm



Markandeya Agadi, a farmer, at his papaya farm in Hitnal village of Koppal district.

Farmers of Hitnal hobli in Koppal district have shown how hard work, coupled with support from the government, could help them reap good yield and make profits. A group of 10 in the hobli, including Kasanakandi, Bagalal, Ginigeri, Allahnagar, Hitnal and surrounding villages, have taken up papaya cultivation in clusters spread over 40 acres. In consultation with the officials of the Horticulture Department, these farmers cultivated 'Red lady-786', a new variety of papaya. The department extended subsidy (50 per cent for Scheduled Castes and Tribes and 40 per cent for general category) to them under the Comprehensive Horticulture Development Scheme. In addition, they also got 90 per cent subsidy under the National Horticultural Mission for adopting the

micro irrigation system. “The cost of cultivation was around Rs. 1.5 lakh per acre. Around 1,200 saplings were planted in an acre and application of manure was through the micro-irrigation system. Spraying is also done periodically. From the eighth month, we started getting the yield for a period and would continue up to 18 to 20 months. The average yield would be around 50 to 60 kg per plant and with proper maintenance – application of manure and spraying – the yield may go up to 80 to 100 kg. On an average, the yield per acre would be around 60 tonnes. At the minimum rate of Rs. eight to 10 per kg, it would fetch around Rs. 5 to 6 lakh in a span of two years. Minus the cultivation cost, the farmer would get around Rs. 3 to 4 lakh,” said Markandeya Agadi, a farmer. He said that papaya grown here had good market in Indore, New Delhi, Gujarat and Mumbai. These farmers have also gone a step further. They have already cultivated pomegranate, as an inter-crop between papaya harvests, to ensure that their income would not be interrupted. “Cultivating pomegranate amid papaya would prevent the attack of blight disease on the one hand. By the time our papaya harvest is over, we can start reaping pomegranate for the next four years,” Mr. Agadi said. Srikant Kotimani, Joint Director of Horticulture, Koppal, said papaya cultivation had been taken up in around 268 hectares in four taluks.

Agricultural activities on in full swing in Mysore



Crops are expected to be cultivated on over 4,19,695 hectares in Mysore district during this kharif season. Sowing has been completed in 3,10,287 hectares.—

PHOTO: M.A. SRIRAM

The district has received 515.1 mm rainfall till September 1 this year, a little more than the normal rainfall of 504.9 mm. However, rainfall was not even across Mysore district. While H.D. Kote, Mysore, Nanjangud and T. Narsipur received more than the normal rainfall, the other three taluks — Hunsur, K.R. Nagar and Periyapatna — received less than normal rainfall till September 1.

Rainfall

T. Narsipur taluk received rainfall of 426.5 mm as against the normal rainfall of 394.4 mm, Nanjangud received 463.8 mm as against the normal rainfall of 414.6 mm, Mysore taluk received 474 mm as against the normal rainfall of 423.8 mm, and H.D. Kote taluk received 695.2 mm rainfall as against the normal rainfall of 680.8 mm. Hunsur received 452.6 mm rainfall as against the normal rainfall of 462.9 mm, K.R. Nagar received 396.6 mm as against the normal rainfall of 418.2 mm, and Periyapatna received rainfall of 494.1 mm as against the normal rainfall of 558.7 mm. However, this has not affected agricultural activities, which are on in full swing across all seven taluks. Crops are expected to be cultivated on over 4,19,695 hectares during this kharif season. Sowing has been completed in over 3,10,287 hectares. M.

Mahanteshappa, Joint Director, Department of Agriculture, told *The Hindu* here on Wednesday that cultivation would be taken up on 3,01,210 hectares in rain-fed areas. Of this, sowing had been completed in 2,40,671 hectares. Similarly, cultivation would be taken up on 1,18,485 hectares in irrigated areas. Of this, sowing had been completed in 69,616 hectares. He added that sowing of cotton and tobacco had been completed in the district, while paddy transplantation was going on. Excess rainfall or presence of moisture content in the atmosphere may not have an adverse effect on the growth of crops except cotton and tobacco, Dr. Mahanteshappa said. He explained that if there was excess moisture for another 15 days, it could have a debilitating effect on flower formation in cotton and tobacco crops. The Agriculture Department had already distributed 22,000 quintals of seeds at subsidised rates to small and marginal farmers through Raitha Samparka Kendras and more than 24,000 farmers had benefited. He claimed that the department had taken steps to ensure that fertilizer would be available to farmers on demand.

'Funds available for flood relief'

Additional Chief Secretary to Government Rural Development and Panchayat Raj Department and Raichur district in-charge secretary T.M. Vijaya Bhaskar said that the administration had enough funds to take up relief and rehabilitation work in flood-hit areas. He was speaking to presspersons here on Wednesday after visiting some of the flood-hit areas in the city. "Raichur suffered due to rain that had lashed the district for a week. Houses, roads, bridges and standing crop on vast tracts of lands have been destroyed. The survey to assess the loss on the one hand and relief work on the other have already begun. A detailed report on the loss and relief and rehabilitation would be submitted within couple of days," he said. T.M. Vijaya Bhaskar, Additional Chief Secretary to Government Rural Development and Panchayat Raj Department and Raichur district in-charge secretary, said that the Zilla Panchayat had set a target of constructing 35,000 individual toilets in the district. He flagged off 'Swabhimannakki Swachhata Rathayatre' outside the office of the zilla panchayat here on Wednesday. "The government will provide Rs. 10,000 for constructing toilets. The people should use the scheme," he said.

BJP demands transfer of 'kumki' land to farmers

T.V. Hegde, president of the district unit of the Bharatiya Janata Party (BJP) said on Wednesday that the State government should take immediate steps to allot 'kumki land' belonging to the Revenue Department to farmers in Udupi district. Kumki land refers to the plots situated adjacent to agricultural land. Kumki land is used for cattle grazing. The shrubs grown on kumki land is used as natural fertiliser in the fields.

Addressing presspersons here on Wednesday, Mr. Hegde said that according to the information available to him, nearly 10,000 small farmers would receive notices to vacate these kumki plots on which they were conducting agricultural operations. This problem had arisen because of an affidavit filed by the State government in the High Court assuring that the former would clear encroachment on kumki lands. As many as 40 farmers in Karkala taluk had even received notices from the taluk office asking them to vacate the land in 15 days. This move would hit the small farmers hard, he

said. When the BJP government was in power in the State, it had decided in principle to allot kumki land to farmers. However the measure could not be taken further because of the declaration of Assembly elections in 2013. The Congress government should take this move further and allot the kumki plots to the farmers, Mr. Hegde said. If there was no positive step from the State Government in this direction, the BJP would organise all the 10,000 farmers and launch an agitation in the district, he said.

Vegetable prices likely to go up

Vegetable prices came down on Wednesday with Tuesday's hartal affecting the transportation of perishable goods to the market. Most of the vegetables at the Ernakulam market traded at prices lower than what were prevailing on Monday. However, N. H. Shameed of Ernakulam Market Dealers Association told *The Hindu* that prices would go up on Thursday and Friday but was likely to come down on Saturday, on account of the last day of Onam sales. In the run-up to Onam, prices of carrot, bitter gourd, nendran variety of banana, broad beans and long beans (cowpea) generally go up. But the market on Wednesday witnessed either less price for these commodities or no change at all. Carrot traded in the wholesale market at a much lower rate of Rs.35 a kg compared to Rs.45 on Monday. In the retail trade carrot was quoted at Rs.52 on Monday while it was Rs.42 on Wednesday. Prices ruled high on Wednesday in the Vegetables and Fruits Promotion Council Keralam market where long beans (cowpea) was quoted at Rs.70 a kg in the wholesale while nendran was sold at Rs.58. Bitter gourd traded at Rs.55 in the wholesale market and Rs.65 in the retail market. The outlets of State agency, HortiCorp, provided vegetables at a much lesser price with 30 per cent subsidy on all items. Availability of cowpea was a major problem with rain causing much damage in the harvest season, said a senior official in the HortiCorp. All HortiCorp outlets — direct, franchise and SupplyCo — are providing subsidy from Wednesday onwards. There are 26 of such outlets in the district. The day's price of carrot was Rs.42 a kg, cowpea Rs.52, broad beans Rs.48, nendran Rs.45 and bitter gourd Rs.42. Some of the other popular Onam vegetables at HortiCorp were priced as follows: ash gourd Rs.14 a kg, okra (ladies finger) Rs.22, pumpkin Rs.15, curry cucumber Rs.18, green chillies Rs.32, ginger Rs.70, tomato Rs.30, pineapple Rs.28 and njalipoovan banana Rs.62.

Crime Branch to probe foodgrain diversion

The division bench of the Lok Ayukta on Wednesday directed S. Ananthakrishnan, Additional Director General of Police (ADGP), Crime Branch, to inquire into the allegation of missing of foodgrain allotted to the State government by the Food Corporation of India (FCI). The order was issued while conducting a preliminary inquiry into a case filed by one Harihara Sharma. Pius C. Kuriakose and K.P. Balachandran presided. The complainant named the Minister for Food and Civil Supplies; the Commissioner, Civil Supplies; the Director, Civil Supplies; the Chief Accounts Officer, Civil Supplies; and the Rationing Controller, Civil Supplies, as respondents in the case. His case was that a major chunk of foodgrain supplied by the FCI reached the black market instead of the public distribution system. The case is posted to October 15 for the preliminary report of the ADGP.

Loan waiver: bankers told to submit farmers' details

East Godavari Collector Neetu Prasad on Wednesday asked the bankers to submit details of the farmers who were eligible for the loan waiver scheme by September 5. Addressing the bankers and other officials here, after attending the video-conference conducted by Chief Secretary I.V.R. Krishna Rao, Ms. Neetu said that the bankers must compile the data by taking into consideration the details of Aadhaar and ration card of the beneficiaries. She said the government was planning to announce the list of beneficiaries by September 15. The government released a pro-forma with 27 columns to identify the beneficiaries for the loan waiver scheme, she said.

Farmer plumbs the depths of despair



It's a perfect case of a solution turning into a problem. If there was non-availability of water to irrigate fields, sinking a borewell was the solution. But in the case of one farmer, the solution became a problem, so much so that he was forced to sell land to clear the dues he accumulated for sinking 100 borewells. This is the story of Maligireddy Ananta Reddy (56) of Vattipally village of Marriguda mandal in Nalgonda district. He says that he is the only farmer who has sunk 100 borewells without any success. Hitherto, another farmer, Rami Reddy of the district, became the symbol of distress of farmers who were spending a lot of money to sink borewells. Rami Reddy, whose name is frequently taken by politicians to symbolise the farmers' plight, sunk 50 bore wells. M. Ananta Reddy sunk more than 100 borewells in a span of 14 years to save his 10-acre mango orchard which he hoped would fetch him at least Rs. 10 lakh per annum. But his efforts went in vain as none of the bore wells yielded water. Finally, he had to sell his 10 acre land to a realtor from Hyderabad to clear the ever piling debts in 2009. Reddy told *The Hindu* that he owned 12 acres of land when he dug a borewell that provided some water. Chasing a dream of earning Rs. 10 lakh in a year, he took to mango orchard cultivation in 10 acres but within a year, the borewell dried up forcing the then 30-year-old farmer to go on digging spree for the next 14 years. His wife Sujathamma says: Reddy sank 10 bore wells in a month. The deepest was 550 feet and the lowest was 220 feet. My husband was adamant that that the borewell rig should not leave the field without pumping a bucketful of water. "The borewell rig owned by J.J. Borewells alone drilled about 80 of them in his field," says K. Srinivas, another farmer. As the borewell digging continued, Mr. Reddy began buying water from nearby fields, but this helped the crop only for a few years. Mr. Reddy even sank a borewell amid houses in the village promising to supply drinking water free of cost so that he could use it to irrigate his fields. He laid an expensive two-km-long pipeline to his fields but even that dried up, shattering his dreams. With the total investments shooting up to Rs. 15 lakh, he consulted his wife and two sons and decide to sell the land and quit farming.

Water released to AMR project

Education Minister G. Jagadishwar Reddy released water to Alimineti Madhava Reddy (AMR) Project from Akkampalli Balancing Reservoir (AKBR) here on Wednesday. The Minister said 1.70 lakh acres are being cultivated under AMRP, but the successive governments never released sufficient water to the ayacut in the past. We are yielding the fruits of division of Andhra Pradesh as Telanagna is getting its due share of water, he said.

Strong argument

He said the Telangana government put a strong argument before the Krishna Water Board to get its due share of water from left bank canal and AMRP. Following the directions of the Krishna Water Board authorities, irrigation officials of AMRP Division-IV had started pumping of 1,200 cusecs of water by starting two lift motors to pump water into AKBR since Tuesday to enable the Telangana government to draw water to AMRP. Divisional Engineer Devernadar Reddy said that they would release sufficient water to ayacut under AMRP through out the Kharif season. District Collector T. Chiranjeevulu and others were present.

'India talking to WTO members on food subsidy issue'

India is talking to "good number" of countries to garner support on its stand on the food security issue at the World Trade Organisation (WTO) with a view to carrying forward the talks for freer trade. The WTO has resumed work at Geneva from September 1 after a month long vacation. "We will start from where we have left. The bottom line is already made clear. We are willing to talk but achieve the same objectives in whatever manner," Commerce Secretary Rajeev Kher told reporters here. He said that it was now up to the WTO Director-General Roberto Azevedo to convene meetings in the form of either calling heads of delegation or in smaller groups. "We are talking to few countries...a good number of countries," Mr. Kher said when asked whether India was engaging with other WTO members to garner support on its tough stand which led to failure of talks in Geneva. At its last meeting at Geneva on July 31, the 160-member WTO failed to agree on a global customs pact popularly called the Trade Facilitation Agreement (TFA). India had decided not to ratify WTO's TFA, which is dear to the developed world, without any concrete movement in finding a permanent solution to its public food stock-holding issue for food security purposes. New Delhi has asked WTO to amend the norms for calculating agriculture subsidies so that the country could continue to procure foodgrains from farmers at minimum support price and sell them to poor at cheaper rates without violating the norms. The current WTO norms limit the value of food subsidies at 10 per cent of the total value of foodgrain production. However, the quantum of subsidy is computed after taking into consideration prices that prevailed two decades ago. — PTI

Climate change threatens food production

We've all heard about the dangers of climate change on world food security, but by 2050 our ability to produce food may be lowered by up to 10 per cent due to rising air pollution, according to new research published by *Nature Climate Change*. "Human activities have increased the concentration of carbon dioxide in Earth's atmosphere by over 30 per cent during the past 200 years and this figure is expected to double by the end of the century," says lead author Arnold Bloom. "Our report found this change in air pollution inhibits the growth of field-grown wheat by 10 per cent." According to Mr. Bloom, air pollution will affect both urban and rural farming alike. Field-grown wheat is a staple crop for most developing countries, so if not addressed these findings show food security will suffer more than previously predicted. Adding to the crisis, worldwide food demand is set to rise by 50 per cent in 2050. "Climate change is already making people hungry," says Robin Willoughby, Oxfam U.K.'s policy adviser on food. "Rising temperatures and increasingly extreme and erratic weather patterns are making it harder to grow enough food to eat. Unfortunately, the situation is likely to get worse, placing an additional burden for our humanitarian work as droughts and flooding become more frequent. Climate change threatens to put the fight to eradicate hunger back by decades." So, what will rising air pollution mean for aid workers delivering food in developing countries? "As air pollution begins to effect food supply, NGOs need to promote farming techniques that conserve water and soil, especially in dry or desert areas," says Paul Cook, advocacy director for Tearfund, an international NGO. "NGOs also need to work to give farmers in developing countries access to up-to-date information on weather, climate, disaster early warning, and markets, so they can make well-informed plans and responses. Farmers need to experiment with agricultural approaches, so they are equipped to find solutions in an ever-shifting climate." Mr. Cook says the development sector needs to focus on getting wealthy countries to eat less. However, some people in the sector dismiss these findings, and believe food security depends more on socio-economic factors than climate change and resulting air pollution.

For a WTO stand with PDS in hand

In December 2013, two important items among the many others adopted at the Ninth World Trade Organization (WTO) Ministerial Conference in Bali were the decisions respectively on the Agreement on Trade Facilitation (TF) and on Public Stockholding for Food Security Purposes. The former relates to the reduction of administrative barriers to trade like dealing with custom barriers, documentation and transparency while the latter concerns the procurement and storage of food grains by state agencies for the public distribution of food. Recently, global attention was focussed on these two items as India argued that the adoption of the protocol on trade facilitation should be postponed till a permanent solution to public stockholding for food security had been worked out. Despite intense pressure from the developed countries, including the United States, India stuck to its stand even as the deadline for adopting the protocol on TF passed on July 31. Even though the developing countries have generally backed measures to enhance food security, support for India's stand was not easy to come by this time round. Only Cuba, Bolivia and Venezuela stood with India at the WTO.

Later the U.N. International Fund for Agricultural Development came out in support of India's position. Many countries have openly criticised this step as India's intransigence. But is India's stand unreasonable?

Hunger and under-nutrition

India faces serious problems of hunger and under-nutrition. According to National Sample Survey data, average calorie and protein intake have been steadily declining over the past few decades. In rural areas, the average calorie intake per person per day declined from 2,221 kcal in 1983 to 2,020 kcal in 2009-10. Over the same period, the average protein intake per person per day declined from 62 gm to 55 gm. One sees a similar pattern in urban India; the average calorie and protein intake declined from 2,089 kcal and 57 gm in 1983 respectively to 1,946 kcal and 53.5 gm in 2009-10. The vast majority of the population remains seriously undernourished. If we look at more direct measures of malnutrition, this picture is equally grim. According to the latest National Family Health Survey (NFHS, 2005-06), about 40-45 per cent of children under the age of 3 years are underweight and stunted. Close to 80 per cent of children aged between 6-35 months and 58 per cent of pregnant women aged between 15-49 years are anaemic. About 33 per cent of women and 28 per cent of men aged between 15-49 years have a below-normal body mass index. In terms of malnutrition, India fares worse than many sub-Saharan African countries.

Trade collides with food security

Given this enormous burden of hunger and under-nutrition, it is only natural that India places a high priority on food security. A key mechanism to address the problem of hunger and under-nutrition has been the Public Distribution System (PDS). It involves the procurement of food grains from farmers, transporting and storing them in warehouses and then distributing them to consumers. In recent years, the price paid to farmers known as minimum support price (MSP) has been higher than open market prices. Also, the price at which the food grains are distributed to consumers known as the issue price has been lower than the market price. Hence, PDS involves providing a subsidy to both farmers and consumers. The subsidy to farmers, estimated to be about 20 per cent of the overall food subsidy, provides income support to poor agricultural families. The subsidy to consumers, by providing staple food grains at affordable prices, is necessary to increase consumption of poor families and address the widespread problem of hunger and under-nutrition. Being a member of the WTO, India is bound by the agreements that have been signed and ratified by its members, including itself. According to Article 6 of the Agriculture Agreement, providing minimum support prices for agricultural products is considered distorting and is subject to limits. The subsidy arising from "minimal supports" cannot exceed 10 per cent of the value of agricultural production for developing countries. PDS in India entails minimum support prices and public stockholding of food grains. It is possible that, in some years, the subsidy for producers will exceed 10 per cent of the value of agricultural production. In that eventuality, India would have contravened the Agriculture Agreement and be open to legal action by other members of the WTO. It is here that trade and food security collides for India. On the one hand, India needs to continue with the PDS to address problems of hunger and deprivation this involves

procurement and public stockholding of food grains. On the other hand, its membership in the WTO ties its hands on subsidy.

Possible solutions ignored

As part of the discussions on agriculture in Bali, this conflict between trade and food security came up for intense debate. Two solutions exist. The first comes from a proposal circulated by the G-33 group of countries in November 2012. This proposal argued for amending the Agriculture Agreement so that support for farmers (that comes through procurement) in developing countries is allowed without limits. The second solution was offered by India at Bali. The current method used by the WTO to compute the subsidy to producers multiplies the amount of procurement with the difference between the procurement price and a fixed reference price, which is the average of prices prevalent during the period 1986-88. This method is absurd because actual prices have increased several-fold since 1986-88. India has argued that the reference price used in the calculation should be moved forward on a rolling basis. Both these solutions offered by developing countries have so far been ignored by the dominant forces of the developed countries in the WTO. The developed countries are more interested in trade facilitation. As negotiations proceeded, India saw a reluctance on the part of some developed countries to deal with the issue of public stockholding. The possibility of a permanent solution to the issue of public stockholding by the 11th Ministerial Conference (i.e., within the next four years) would reduce substantially once the protocol on trade facilitation was adopted. Hence, India refused to agree to sign the protocol on trade facilitation unless there was an assurance of finding a permanent solution to the issue. There is one area where the interests of the vast majority of India's undernourished population and genuine concerns of WTO members coincide, and the Indian government would do well to recognise and act on this. A major and genuine fear of WTO members is that India will dump its huge stock of food grains on the world market, crashing food prices. The fact that India has an unusually large stock of food grains is the result of the refusal of the government to disburse these food grains — for instance, through food for work programmes — because of the fear of increasing the food subsidy bill. The government could send appropriate signals by continuously releasing the food stocks only in the domestic market, addressing at one go, the genuine concerns of WTO members and the nutrition needs of its citizens.

Cash for food?

While many commentators have been sympathetic to India's concern with food security, they have also argued for replacing the existing in-kind PDS with a cash transfer system. This would do away with procurement and public stockholding, and automatically solve the WTO issue of subsidy to farmers. Moreover, dismantling the existing in-kind PDS and replacing it with a cash transfer system is also a more efficient way of distributing subsidies. The current system is plagued by corruption and leakage that the cash transfer system will solve. Along similar lines, others have supported the dismantling of the PDS even as they have argued for the continuation of public stockholding to check price instability. The key thrust of both arguments is to dismantle the existing PDS. Such arguments are problematic because they fail to

engage with two important facts. First, the coverage, reach and effectiveness of the existing PDS have improved over time. Second, there is significant variation in the performance of the PDS across States. While some States like Himachal Pradesh, Kerala and Tamil Nadu have consistently performed well, others like Chhattisgarh and Uttarakhand have improved significantly. Thus, arguments for dismantling the PDS are wrong-headed. They are back door arguments for opening up the food economy to big, private capital that can have deleterious effects on the livelihood of peasants and agricultural labourers. India should continue with its stand at the WTO to demand a permanent solution to the issue of public stockholding before the protocol on trade facilitation is signed. It should also resist efforts to dismantle the existing in-kind PDS; on the contrary, it should make every effort to strengthen it. (*Deepankar Basu is assistant professor in the Department of Economics, University of Massachusetts Amherst, U.S., and Debarshi Das is associate professor in the Department of Humanities & Social Sciences, Indian Institute of Technology, Guwahati.*)

Antibiotics in the chicken we eat



The road from Hyderabad to Bangalore is full of history. On the way is Banganapalli in Rayalaseema, a place with legendary history. Until the late 1700s it was a major area for diamonds. Quarried from there, diamonds were brought over to the Nizam's Hyderabad, where thousands of merchants marketed it across the world. Strip-mined to the last carat by the late 1800s, we lost out to South Africa and South America both in production and sales of this king of gems. Banganapalli has also been known for another king, mango the king of fruits. Even today the Banganapalli mangoes (also called *Benishan* or spotless) give the much overrated Alphonso a run for the money. But alas, over the last decades, traders' greed has led to a crisis. In their bid to ripen the fruit quickly and in the godown, they have resorted to using calcium carbide, which generates the fruit ripening gas ethylene, to do so. Result, the fruit is unevenly ripe and not as sweet as the tree-ripened ones. The residual carbide poses health hazards as well. The government appears to have finally woken up but has only issued warnings to the fruit sellers so far. These days, as we drive from Hyderabad to Bangalore, what hits the eye is row after row of poultry farms. These are the chicken factories owned and operated not by the villager who may breed a few in his home, but by industrial hatcheries. These and similar ones elsewhere across the country have led to a "chicken and egg" revolution in India, somewhat similar to the green and white revolutions. The midday meal scheme in Tamil Nadu has introduced eggs as an occasional part of the meal for school children, with the admirable idea of better nutrition. But there is a danger here. Just as with chemicals in the mango, or oxytocin in milk (a hormone that supposedly increases milk output in cows and buffalos), we now have a health hazard looming large in commercially produced chicken. The hazard here is the use of antibiotics in the feed given to the chicken for faster growth

and to prevent any infection during hatching. Famous hatcheries such as Venky's, Vetline India and Skylark Hatcheries regularly use antibiotics in order to reduce feed conversion ratios. The environmental science journal *Down to Earth*, in its 1-15 August, 2014 issue, has highlighted the problem by analysing the antibiotic content in the chicken meat obtained from various markets in its labs, and the results are alarming. Typical antibiotics found in the chicken liver, muscles and kidney are the tetracyclines (such as doxycycline), fluoroquinolones (such as enrofloxacin) and aminoglycosides (such as neomycin). Why are these dangerous? Repeated and prolonged exposure will lead to the emergence of resistant strains of bacteria. And these resistant strains will be passed on to the humans who consume them. Even the un-mutated bacteria in the meat can directly unleash an assault on the microbes in our guts. And note too that the antibiotics used in poultry are the same as the ones used for humans. What about the inedible parts of the chicken that we throw away or bury in the ground? Resistant strains from the feather, bone and such are now transferred to soil, ground water, ponds and streams. In effect, as *Down to Earth* points out as a microbe becomes resistant, it influences other microbes present in the gut of the chicken and then those in the environment, making them resistant to a wide range of antibiotics. It is thus imperative that government takes urgent steps to deal with this growing misuse of antibiotics in the poultry industry. Dr Chandra Bhushan of *Down to Earth* has come up with a set of recommendations. Some of these are: (i) Ban the use of antibiotics for growth promotion, (2) Do not allow the use of antibiotics in feed and improve the regulations of the Bureau of Industrial security (BIS) accordingly, (3) Do not allow the use of antibiotics critical for humans in animals, (4) Train veterinarians on the judicious use of antibiotics, (5) Set pollution standards and install pollution control systems to limit transfer of resistant bacteria and antibiotics from poultry farms to the environments, (6) Encourage development, production and use of alternative antibiotic-free growth promoters such as herbal supplements and better farm management practices, and (7) Develop an integrated surveillance system to monitor antibiotic-resistant trends in humans, animals and the food chain. In all this, time is of the essence. Why? Microbes grow fast. Their generation time is in minutes and hours. The chances of mutation, and the time involved in generating newer strains are thus far, far lesser than in animals. In fighting microbes with newer and newer antibiotics, we are fighting a hard-to-win battle, rather reminiscent of the myth of the Corinthian king Sisiphus. His punishment for his deceitfulness was to roll a boulder uphill, only to watch it roll back down, and repeat it. Shall we therefore be wiser, since win we must?

D. BALASUBRAMANIAN, dbala@lvpei.org

Water harvesting ensures livelihood security for Dalit farmers

Villupuram is one of the most backward districts in Tamil Nadu. Major crops cultivated there are paddy, onion, pulses, millets, sugarcane, casuarina and groundnut, using water from tanks and open wells. The open wells belong to small and marginal farmers and have been abandoned for a long time due to heavy siltation and damaged walls resulting in poor storage and ground water recharge. The district receives the least amount of rainfall during the north east monsoon season. Most of the farmers

who did not have access to water moved to growing eucalyptus and casuarina. Those who continued with their cultivation could grow only a single crop in a year.

Labour drain

“What was more disturbing and challenging was that women started working as daily farm labour instead of farming in their own fields and men started moving towards cities for non-farm jobs. “These people were ready to work in their fields provided there was water in the wells or tanks. They had no financial resources to desilt them, and the Government or the banks do not have credit facilities for renovating them. “At this juncture MSSRF initiated a Community Managed Bio industrial Watershed project in Vanur and Milam block of this region in 2007,” says Dr. R.S. Shanthakumar Hopper, Director, Ecotechnology, M.S.Swaminathan Research Foundation (MSSRF). The project successfully mobilised the community and with their participation and financial contributions was able to rejuvenate major water bodies. One such water tank in Karasanur village of Vanur Block was desilted. The tank is surrounded by 12 open wells on which 33 dalit, small and marginal farmers are dependent for their farming activities. Hindustan Petroleum Corporation Limited (HPCL), as part of the programme came forward to support this.

Contribution

The project contribution was Rs. 1 lakh for each well and the community contribution was Rs. 25,000 per well. The well renovation was done in two parts one is carrying out deepening by desilting to increase the water availability and groundwater recharge; and the other is steining wall (well wall) construction to prevent soil erosion and silting. The fund was initially transferred to a water user group to ensure accountability and transparency. A three-member committee monitored the activities and released the funds based on the activities completed. “We didn’t have money to contribute and it took six months to save Rs 25,000 and 60 per cent of our members mortgaged their jewels and sold their goats and contributed for wells renovation. Now I am earning Rs 60,000 by cultivating three crops a year and have got back my mortgaged jewels, ensured better education for my children, the entire family is now engaged in agriculture activities and there is no migration,” says Ms. Kalyani, one of the beneficiaries.

Training

About 33 small and marginal farmers were trained in water use efficiency, crop diversification, participatory technology development (PTD) of crops like onion, paddy, groundnut and pulses through farmers field schools. “Each family was provided with a soil health card to monitor and implement the required nutrients. The land belonging to the 33 farm families are in one place, which makes it convenient for them to practise Integrated Pest Management (IPM) interventions. “They were also taken to nearby watershed projects to understand issues of water use efficiency and management of farmer producer organisation. “They are also share holders in the Nallamur Farmer Producer Organisation, which provides them support services like credit, certified seeds, marketing support etc,” explains Dr. Hopper.

Extended

The programme has been extended to cover two more additional villages benefiting 43 small and marginal farmers. Currently plans are on to replicate this model in Pudukottai district. MSSRF was the runners up in the Global Humanitarian Water and Food award for 2014 presented at London on June 18th 2014. To know more farmers can contact Dr. Shanthakumar Hopper, mobile: 09445394394 and Mr. N. Nandeesh, Project Coordinator, M.S.Swaminathan Research Foundation, Mialam, Viilupuram District, Tamil Nadu, email : nandeeshcp@gmail.com, Mobile. 9787644594.

Controlling tea mosquito bug in guava

The tea mosquito bug is an injurious pest on guava fruit. Besides guava, it is a major pest of cashew, cocoa, avocado, apple, grapes, drumstick, silk cotton, pepper, cinchona, ber, camphor, tamarind and neem trees. The nymphs and adults of this pest by virtue of their sap sucking behaviour cause a warty surface on the fruit and corky scab making the fruits unsuitable for marketing and consumption.

Blemished fruits

Nymphs and adults feed on tender leaves, shoots and fruits. Resin exudes from feeding puncture. Leaves and shoots turn brown, with black blisters on fruit surface leading to blemished fruits. Rusty spots on fruits and shedding of fruits are often witnessed in guava orchards. Adult bugs appear with mixed colour of red, black and white with long legs and antennae, looking like mosquitos. About 500 sausage shaped eggs are thrust by a female bug into the tissues of green shoots, buds and leaves. Within two to three days the nymphs hatch out, start sucking the sap up to 3-4 weeks. They look like ants, long and hairy, amber coloured which then turn into adults, living for about 10 weeks. The entire life cycle is completed in 22-25 days. Heavy and continuous rains with no sunshine are a favourable climate for its rapid multiplication. They are active from January to September.

Management methods

Collect and destroy the damaged plant parts. Regular pruning and shade regulation facilitates proper penetration of sunlight inside the canopy which reduces the incidence of this pest. Bagging of fruits in high density planting system prevents infestation of tea mosquito bug as well as fruit fly. Raise yellow sticky traps at 40-50 nos/acre. Encouragement of the egg parasitoid viz. *Telenomus* sp. minimises the usage of pesticides. Bimonthly spray from the time of flowering with malathion 0.1 per cent, lambda cyhalothrin 0.005 per cent, neem formulation at 2ml/lit minimises damages. Application of mineral oil 3 per cent and 5 per cent leaf extract of the five-leaved chaste tree, *vitex negundo*, provides a good control. (Dr. J. Jayaraj is Professor and Dr. M. Kalyanasundaram is Professor and Head, Department of Entomology, Agricultural College and Research Institute, Madurai 625 104, Phone No. 0452-2422956 Extn.214, Email: agentomac@tnau.ac.in)

Chennai

Chennai - INDIA

Today's Weather



Sunny

Thursday, Sep 4

Max Min

32° | 26°

Rain: 0

Sunrise: 05:57

Humidity: 79

Sunset: 06:19

Wind: normal

Barometer: 1005

Tomorrow's Forecast



Cloudy

Friday, Sep 5

Max Min

32° | 26°

Extended Forecast for a week

**Saturday
Sep 6**



35° | 25°

Cloudy

**Sunday
Sep 7**



34° | 25°

Cloudy

**Monday
Sep 8**



34° | 25°

Cloudy

**Tuesday
Sep 9**



35° | 25°

Partly Cloudy

**Wednesday
Sep 10**



35° | 25°

Partly Cloudy

Airport Weather

Chennai

Chennai

Rain: 0

Sunrise: 05:57

Humidity: 79

Sunset: 06:19

Wind: normal

Barometer: 1005



THE  NEW
INDIAN EXPRESS

1,825 Borewells for SC/ST Farmers in State

The Department of Minor Irrigation has evolved a scheme to sink 1,825 borewells under the Special Component Plan (SCP) for SC/ST farmers in the current year and install solar pumpsets, said Minor Irrigation Minister Shivaraj Tangadagi. Talking to reporters here on Wednesday, he said, of the 1,825 borewells sanctioned, 1,000 borewells will come up in North Karnataka. However, this scheme will not be taken up in Kolar, Chikballapur, Tumkur, Bangalore Urban and Bangalore Rural, where the underground water level is depleted and Udupi, Uttara Kannada and Shimoga district where solar power is low. The cost of sinking each borewell in N-K region is `7 lakh and `5.6 lakh in South Karnataka districts. Tangadagi said the department has received 4,000 applications seeking borewells under the SCP and 1,825 beneficiaries have been selected on recommendations of the legislators. As many as 2,000 borewells will be drilled next year. `80 crore has been released to each district to build check dams to improve water table. These check dams will be constructed only after identifying places where there is flow of water. A survey has already been completed in this regard, he said.

Govt's Rabi Potato Plan May End in Whimper

Even as the State Government had set a target last year to attain self-sufficiency in potato production in five years, the rabi programme drawn up by the Horticulture Department for the crop shows its lack of sincerity to the commitment. The Department has decided to cover 20,000 hectares of land under potato cultivation during 2014-15 rabi season and increase the area to 60,000 hectares by 2016-17. The area under potato cultivation till last year was about 15,000 hectares. The decision was taken by the working group at a meeting chaired by Horticulture Director Sanjeev Chadha on Monday though the State Government has set up a task force to prepare a longterm action plan for production, preservation and distribution of potato. The task force constituted on August 20 has been asked to submit its report to the Government in 30 days. Estimating the seed requirement for the current rabi crop at 1.5 lakh tonnes, the working group decided to supply 30 per cent of the seed (50,000 tonnes) from outside sources to maintain the quality and the remaining 20 per cent will be arranged by farmers from local markets. However, sources in the Odisha University of Agriculture and Technology (OUAT) said 12.5 to 14 quintals of potato seed would be required per hectare of land. For 20,000 hectares, the State's seed requirement would be 2.5 to three lakh quintals. The Department had planned to supply 50,000 quintals of seed to farmers during last rabi season but could supply only 27,000 quintals. Even if the Government keeps its commitment on seed supply, it would cover only 5,000 hectares. The meeting decided to engage the National Seeds Corporation, Odisha State Seeds Corporation, Odisha Agro Industries Corporation, National Horticultural and Development Foundation and some private agencies for seed production in the State.

Four districts of Mayurbhanj, Koraput, Kandhamal and Keonjhar are found suitable for seed production. As cultivation of rabi potato starts from mid-October, it would be impossible to supply seeds to the farmers through the seed production programme as planned by the Department, said Premananda Swain, a leading potato farmer of Cuttack district. Since, potato is a highly perishable commodity, farmers do not want to take the risk of going for large-scale production due lack of storage facilities, institutional support for marketing and minimum support price from the Government, he added. Of the 104 cold storages in State, 87 are lying defunct. The Government has not taken any initiative for revival of these units.

Banana Prices Soar Through the Roof

This Onam season is all set to create a record of sorts when it comes to the price of banana. Pushed up by short supply and increasing demand the price of banana stands at Rs 68 per kg now. The traders expect the price to cross the Rs 70/kg mark. Compared with the Onam season last year, the price of banana has increased by around Rs 20/kg. In line with the price rise, customers have to shell out more on items like banana chips and 'sharkara varatti' this time. Around eight trucks carrying a load of 400 to 600 kg is being unloaded at Ernakulam market during Onam days to quench the demand, it is learnt. "The price of banana is likely to go up to a maximum of Rs 75/kg from the current levels. The unavailability in the domestic market and short supply are the major reasons behind this price increase. Of the total demand only 25 per cent is met by domestic production. The domestically available banana comes from Perumbavoor, Malayattoor region. The rest of the demand is met by Mettupalayam and Trichy," said Navab, a banana merchant at Ernakulam market. Market sources said that the price difference between ripe banana and raw banana is only Rs 2 to 3/kg with the domestic variety being more costlier. As the price of banana increases considerably, the price of traditional Onam items such as banana chips and 'sharkara varatti' has also moved north by Rs 30 to Rs 50/kg compared to last year. According to Ashraf, another vegetable merchant in Ernakulam, the price hike is evident in all the vegetable and fruit items and banana is no exception. "The demand in Kerala is met by import from Tamil Nadu. The farmers and traders there await Onam season to reap a rich harvest. The price of banana has been increasing for the past few years. This time, the only difference is that the prices have skyrocketed and is set to break all the past records. Going by the present trend, as three days left before Onam, the price of banana and its byproducts is likely to go up," he said. But the farmers draw a sorry picture. They said they were hardly getting the benefits of the spurt in prices. "The farmers have to invest at least Rs 300 per banana. Now the banana is priced at Rs 68 per kg. But we are getting around Rs 50/kg," said K J Paul, a farmer in Malayattoor.

The Magic of Mushrooms

Muhammad Shafi, an autorickshaw driver in Malam Kunnu near Mukkam took up mushroom cultivation a couple of years ago to earn an additional income to run his family. But now, the 29-year-old man is one of the most reliable mushroom distributors in the hilly regions of Kozhikode district. The oyster mushroom harvested from his farm, set up in a 10 cent plot adjacent to his house, is one of the unavoidable items on the menu of the Ayurveda Hospital canteen. So far he has not failed to deliver mushrooms to the canteen. After completing a diploma in Diesel Mechanics, Muhammad Shafi chose driving as his profession with an aim to devote some time for farming. "I spend my morning hours exclusively in my mushroom farm; only after that I don the role of a driver," smiles the young farmer. Instead of opting for vegetable cultivation, he went for mushroom cultivation as he was ready to take risks. His wife Raheela says that her soft-spoken husband turns eloquent when asked about mushrooms. "He is a passionate farmer and that is why he was able to set up another farm on the terrace of his house within a short span," she says. His mother, 50-year-old Fathima, also helps her son make it a profitable venture. With the encouragement of the officials with the Agriculture Department, he attended various training camps. To increase his expertise he attended a special session on 'spawn culture' to develop quality spawns. "The timely intervention of the Agriculture Department officials have helped me a lot to avoid errors," he says. Though milky mushroom (paalkoon) is a year-round-crop, oyster mushroom (chippi koon) is a seasonal crop and has many takers. The complementary packets of mushrooms that he distributed among shopkeepers in the initial stage increased his consumers. "Those who taste mushroom dishes for the first time will become their ardent fans," he smiles. Going eloquent on the medicinal quality of oyster mushroom, Shafi says, "There are still people who are apprehensive about the edibility of mushroom, but from my experience I have come to know that it is the best to improve immunity. A plate of any kind of mushroom dish will help you keep your energy levels high," he says. Unavailability of quality spawns was what troubled him during the initial period. To overcome the adverse situation, he set up a mini lab at his house. In his words, farmers have to learn spawn culture, otherwise they would be forced to rely on labs in and around the state to get quality spawns. He is now busy renovating his farm to increase the quality and quantity of his produce.

Business Standard

Late monsoon delays soybean harvest

The country's soybean harvest would be delayed by a month this year, pushing back new-crop soy meal shipments to Southeast Asia until November, traders said on Wednesday. The late arrival of this year's monsoon in the main soybean-growing areas of Madhya Pradesh and Maharashtra states pushed back planting of the crop by more than three weeks. The late monsoon this year in Maharashtra state also led some farmers to shift completely to soybeans from corn because the oilseed needs less water and matures in three months as compared to four for corn. In India, the fifth top

producer of soybeans, the crop is usually sown from the second half of June with the spread of the monsoon rains, with the planting usually over by mid-July. This year soybean ... planting spilled over until August first week," S K Srivastava, head of the state-run Directorate of Soybean Research, said. "Periodic rains have so far ensured good soil moistures for a healthy growth of the soybean crop," added Srivastava, the country's leading soybean scientist. India's soybean crop area stood at 11.03 million hectares against 12.18 million hectares last year, according to the latest farm ministry update. This year's area is 6.3 per cent more than the average area of 10.38 million hectares for the past five years, according to the ministry's update. Traders estimated India's soybean production at 9-10 million tonnes (mt) in 2013, much lower than the Indian government's official figure of 12 mt. Traders said their estimate took into account damage to the oilseed crop from late rains during its harvest season. Last year's lower soybean output led to a 68 per cent rise in India's soyoil imports to 1.2 mt during November 2013 to July 2014, according to the Mumbai based trade body Solvent Extractors' Association of India. India is the world top soyoil importer, with imports meeting about half of its annual demand of 3.2 mt. The country's soymeal exports are estimated to have fallen to around 2.9 mt so far in 2014, down at least a third from last year due to the drop in soybean output, said the SOPA official Agrawal. Soymeal is the solid residue left after extracting oil from soybeans. It is shipped to countries such as South Korea, Thailand, Vietnam and Indonesia to be used as an animal feed.

Rice area goes up as farmers pick up SRI method

Anticipating shortage in soya seed, increased irrigation facility and verbal publicity of SRI (System of Rice Intensification) system of cultivation, farmers in Madhya Pradesh switched over to rice thereby increasing the area by another four lakh hectares. "SRI system of rice cultivation has become wide spread where controlled irrigation is easily available, the area has gone up to 1.8 million hectare this year," a highly placed official said. Normally, state farmers grow rice on area of about 1.4-1.5 million hactare with an output of 1.4 to 1.5 million tonne. "The production of rice in the state has also gone since as many as eight rice processors have set up industries in Madhya Pradesh," the official said adding that "SRI system of rice cultivation is easier and gives better yield, say, 14-15% more than average". Developed in Madagascar SRI cultivation method came in practice some twenty years ago but state farmers have started adopting it in Raisen district during 2005-2006. Unlike transplantation of matured plants farmers transplant younger seedlings of rice under SRI, preferably 8-10 days old. Also they plant single seedlings rather than clumps of 3-6 plants in traditional method thereby increasing chance of productivity. Single seedling transplantation keeps paddy soil moist and through controlled irrigation it remained saturated as a result plant attains proper growth," the official said. Although rice productivity is yet not satisfactory and much below the national average of 2000 kg per hectare. According to state agriculture department stands at 900-1,000 kg per hectare but Shree system has now increased the area for basmati variety of rice. Also state farmers have hope that the state will soon get Geographical Integration for the Basmati variety. The state is fighting a case in Geographical Integration Chennai for the last nine years. "State is most likely to be given approval for Geographical

Integration for Basmati rice," the official said. The state has experienced shortage of soya seed this year and encouraged farmers to switch over to rice cultivation.

Chana down 0.4% on increased supply

Chana remained weak for the second day and prices fell further by 0.42% to Rs 2,865 per quintal in futures trading today as speculators offloaded their positions amidst increased supplies from producing regions in the spot markets. At the National Commodity and Derivative Exchange, chana prices for delivery in October were down by Rs 12, or 0.42%, to Rs 2,865 per quintal with an open interest of 1,12,190 lots. Similarly, the commodity for delivery in September shed Rs 6, or 0.21%, to Rs 2,806 per quintal in 84,290 lots. Analysts said offloading of positions by speculators, triggered by increased supplies from producing regions in the physical market against sluggish demand from dal mills, kept pressure on chana prices at futures trade.



Flour Mills pitch for a national grains board

Flour millers are asking the Government to set up a national grains board on the lines of the Canadian Grains Commission to strengthen the wheat value-chain. The Board should regulate, coordinate wheat operations across the entire wheat value chain, said a resolution at the International Wheat Seminar. It also called for forming an application centre that could come out with new wheat products. Earlier in his valedictory address, V Prakash, Vice-President, International Union of Nutritional Sciences, called for according priority to food safety and adding value to wheat products. He also said mills should also be modernised but it should also have a humane touch to it. With four million meals being eaten every day in India, food products had a great potential in the country, he said.

Flour mill sets up wheat silo complex in Tamil Nadu

Naga Ltd, the Dindigul-based firm that has four wheat flour mills in Tamil Nadu, has set up a silos complex to store 64,000 tonnes of wheat, the first such initiative by a private company. "Our complex has eight silos that can store 8,000 tonnes of wheat each. Without taking the cost of land, it cost us Rs. 25 crore," said KSK Kannan, Chairman of Naga Ltd, told *Business Line*. The silos go a long way to help the private miller, who require 800 tonnes of wheat every day for milling. "It means we would need one rake of wheat every three days. Getting this done will be a big task as a lot of loading and unloading has to be done," he said. In turn, it saves costs incurred on labour and handling besides saving wastage. The storage bin, set up a few months ago by Turkey's Mysilo, is a necessity, said Kannan. Setting up storage bins, however,

involves fumigating the stored grains and maintaining the moisture level. At the International Wheat Seminar here, the focus was on storage. A group of millers in Karnataka are considering setting up similar silos. They have got in touch with National Collateral Management Services Ltd. "The idea is at a formative stage and it involves tying up various things such as land, separate railway terminal, equipment. We could buy land as a group but need permission to set up railway terminal," said Pramod Kumar, Director of Sunil Agro Foods. Interest in setting up storages is picking up among millers, resulting in some logistics coming up with different offers, including silo bags. For example, a private firm is floating the idea of silo bags, an Argentine concept. Silo bags, made up of a three-layer film including one to protect against ultra-violet rays emitted by the sun, help in storing grains horizontally over a length ranging from 60 metres to 100 metres.

Govt plans rice silos on pilot basis

The Government is considering setting up modern silos for rice at Buxar and Mohania in Bihar on a pilot basis. At least four storage bins, each with 3,125 tonnes capacity, will come up in the pilot project for which the Department of Economic Affairs (DEA) under the Finance Ministry has prepared a standard document. "The documents will now be scrutinised by the inter-ministerial group before the Food Corporation of India, as the nodal agency of the project, is permitted to float tenders. All this could happen in 2-3 months," said Munishwar Vasudeva of Eco Agri Forum Consulting Services. "The Centre is serious about silos for rice. It has asked a private firm to prepare a project report," said an executive with a logistics firm, not wishing to identify. Vasudeva said the Centre had decided to set up wheat and rice silos in Buxar and Mohania. For every four kg of wheat that is stored, one kg of rice will be stored at these sites. Three storage bins of 12,500 tonnes each will be set up for wheat. For rice, the height of silos is being reduced to handle various problems which could crop up, he said. The Asian Development Bank has funded the project consulting for the silos plan.

Modus operandi

It had asked for separate norms for silos that are being set up on build, own, operate (BOO) and build, own, transfer (BOT) basis under the public-private partnership programme. Under BOT, State Governments will have to provide the land, while the private sector will have to bring in technical expertise, including equipment. Under BOO, the private sector will have to arrange for everything from scratch. Since the BOT arrangement involves FCI, the Centre has now chosen to go the BOO way, sources said. "The DEA has suggested two types of viability gap funding for the BOO project. One is on the technical front, including equipment, computers etc and the other is for buying land," said Vasudeva, who is on the technical advisory panel of FCI and DEA for the project, over phone.

Bangla cues

The Government is also trying to draw strength from a similar initiative in Bangladesh, where rice silos are being set up in two phases. In the first phase, the concept and designs have been prepared. The next stage is implementing and monitoring the progress in setting up the storage bins. Bangladesh is setting up silos with a total capacity of 5.28 lakh tonnes. Of this, two silos are coming up in Chittagong and a nearby place to store 1.25 lakh tonnes and 75,000 tonnes of wheat. Rice will be stored in six silos of 40,000 tonnes capacity each.

Cost savers

The Centre is keen on setting up silos for wheat and rice since they help in saving costs on labour for loading and unloading (in mandis, warehouses and at the user end), packaging and transportation. It will also help save mandi taxes, which are nearly 15 per cent in Haryana and Punjab. Silos will also help curb post-harvest losses that are estimated at nearly 20 per cent of the total foodgrain procurement by the Government in a year. This year, the Government procured four lakh tonnes of wheat in bulk for storage in silos that have been set up by Adani Logistics on a pilot basis. About 25 per cent of the cost has been saved through this procurement. In the pilot project, Adani has two base depots at Moga in Punjab and Kaithal in Haryana to store two lakh tonnes of wheat each. Besides, it has field depots at Tada near Chennai, Coimbatore, Bangalore and Hoogly with a storage capacity of 25,000 tonnes each. It also has a depot at Navi Mumbai to store 50,000 tonnes of wheat. On the other hand, the Centre is likely to float tenders for setting up 42 silos to store about 20 lakh tonnes of wheat soon. The tenders were scheduled to be floated in July last year but had to be put off due to problems in the documentation process. The problems have been rectified, said sources at the International Wheat Seminar.

Volume drops at Coonoor tea sale

The falling trend witnessed the last few weeks in the offer for Coonoor Tea Trade Association auction continues for Sale No: 36 to be held on Thursday and Friday. A volume of 15.10 lakh kg has been catalogued – as much as 2.33 lakh kg lower than previous week's offer. Of this, a volume of 10.63 lakh kg belongs to the leaf grades and 4.47 lakh kg belongs to the dust grades. As much as 14.18 lakh kg belongs to CTC variety and only 92,000 kg, orthodox variety. In the leaf counter, only 49,000 kg belongs to orthodox while 10.14 lakh kg, CTC. Among the dusts, only 43,000 kg belongs to orthodox while 4.04 lakh kg, CTC. With substantial volumes remaining unsold in previous auctions, as much as 2.57 lakh kg of such teas are being re-offered this week. In the leaf auction last week, among corporate buyers, Hindustan Unilever Ltd bought brighter liquoring varieties and orthodox Fannings. Tata Global Beverages Ltd was fairly active on good medium sorts. Godfrey Philips India Ltd showed some interest on medium broken. In the dust auction, HUL was fairly active on good medium varieties and orthodox dusts. Duncans Tea selected some better medium bolder grades. Indcoserve expressed interest for good medium smaller grades. There

was good demand for brighter liquoring teas from upcountry buyers. Overall, internal buyers were less active. Exporters chose mostly plainer grades.

Karnataka sugarcane growers mull crop holiday

Beleaguered sugarcane growers in Karnataka have threatened to go on a crop holiday if the State Government does not intervene and help them realise their dues from mills by mid-September. This is even as mills have commenced the new crushing season, mainly in the southern parts of the State, the third largest sugar producer after Maharashtra and Uttar Pradesh. "Sugar mills in the State owe a total of Rs. 2,300 crore to the farmers," said Kurubur Shantkumar, convenor of State Cane Growers Association. He suggested that the State Government make the payments to farmers directly and later recover the same from millers. Further, Shantkumar demanded that a meeting of the Karnataka Sugarcane Control Board should be convened immediately to fix the cane price for the 2014-15 season, starting October, as crushing has already begun in the State. Sugar production in Karnataka stood at over 4.15 million tonnes, accounting for about 18 per cent of country's output of 24.3 million tonnes. Shantkumar said the situation of farmers in the State, who have not received their payments for the last 18 months, has turned pathetic and blamed that the Government and mill owners were not serious about resolving the arrears issue. "If the Government does not intervene by September 15, farmers will have to resort to agitation," he said. On the other hand, the association is contemplating declaring a crop holiday by not taking up fresh planting. "We are trying to create awareness among the farmers about the alternative crops such as banana, coconut, mango and papaya that are seen more profitable," Shantkumar said.

UP stalemate

Meanwhile, the stalemate continues in Uttar Pradesh, where majority of the private millers have decided not to start crushing operations for the new season starting next month, in absence of a rational cane policy. Sources said the UP millers have decided to boycott the cane area reservation meetings being convened by the UP Sugarcane Department next week.

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Good monsoon sees paddy, soya farmers shift to cotton

Good rainfall in the last week of August has helped cotton plant growth in major growing states such as Gujarat, Maharashtra, Madhya Pradesh, Andhra Pradesh, Telangana and Karnataka. As per reports, in some states, like Andhra Pradesh and Karnataka, farmers have shifted from paddy and soya cultivation to cotton farming due to good returns. Overall acreage may jump by 12-14% of last season as per estimates by seed suppliers, said Indian Cotton Federation on Wednesday. Going by the current climactic conditions, cotton production may cross the 400 lakh bales mark in the current season. The price is ruling steady and the National Commodity and Derivatives Exchange will introduce long staple cotton futures, the federation said. In Punjab, there has been a drop in cotton cultivation by 10% while in Rajasthan there has been an increase of 40% in cotton sowing by farmers. The prices for good quality J-34 r/g was R4,335/spot per maund while in Haryana it was priced at R4,310/spot per maund. In Rajasthan, it was quoted at R4,290/spot per maund. There has been good and consistent rainfall in most of the cotton growing belts of Gujarat and has led to reduction in prices for good stock cotton at around R40,500/spot per candy and V-797 r/g was priced at R30,000/spot per candy. In Madhya Pradesh, the monsoon has been bountiful and will benefit the farmers. The price for good quality Bunny of 29 mm is priced at R41,500/spot per candy. The present spell of rain in the last one week has changed the picture of agriculture in Andhra Pradesh as the dams have started overflowing and many farmers have shifted from soya cultivation to cotton in the current situation. According to the federation, there has been consistent rainfall in the last one week and has given a new lease of life to cotton plants surrounding Raichur area in Karnataka. New crop Dch-32 and Bunny are already arriving in small pockets of northern Karnataka in Gokak and southern Karnataka in Bellary.

Mills await clarity on incentives for export of raw sugar

Sugar mills in Maharashtra are awaiting clarity from the Narendra Modi government on the incentives to be given on exports of raw sugar for the sugar season of 2014-15. The earlier government had notified an incentive of R3,300 per tonne for production of raw sugar for exports in a bid to bring down the stockpile by promoting exports. As a result, around 41 sugar mills in Maharashtra exported around 6.61 lakh tons for the year 2013-14. Traders who usually book orders ahead of the start of the crushing season, this time are awaiting clarity from the Centre, top officials of the Maharashtra State Cooperative Sugar Factories Federation (MSCSFF) said.

Indian mills traditionally produce white sugar and produce raw sugar only as per market demand. Sanjeev Babar, MD, MSCSFF, said the industry is hopeful of continuation of the raw sugar policy. A delegation led by federation chairman Vijaysinh Mohite Patil had recently met Union food minister Ram Vilas Paswan with a representation seeking continuation of the incentives on raw sugar exports.

Abhinash Verma, director general, Indian Sugar Mills Association, said the previous government said that the scheme shall be applicable for the current sugar season of 2013-14 and the next season of 2014-15. However, it also said the scheme shall be reviewed at the start of the new sugar season of 2014-15, which means the scheme won't work, he added.

THE ECONOMIC TIMES

India's livestock population drops by 3.33 per cent

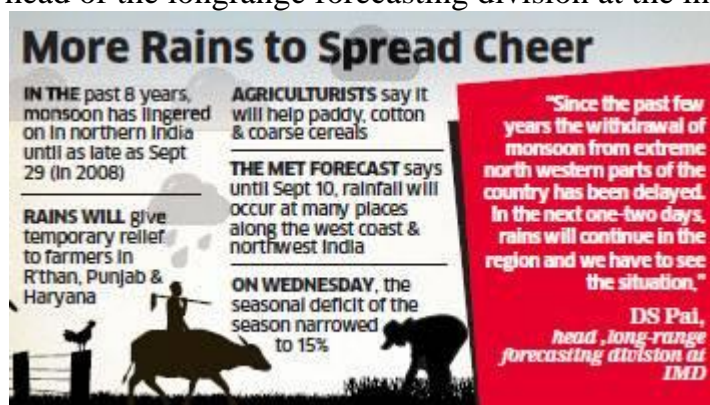


India's livestock population including cattle and sheep has dropped by 3.33 per cent to 51.20 crore in 2012 from over the 2007 level. The number of cattle, goat, bovines, sheep, donkey, camels, pigs and yak have dropped, while the population of poultry and buffalo has risen in the same period. "The 19th Livestock Census shows an overall decline of 3.33 per cent in the total livestock population as compared to the previous census of 2007," according to the final census released by Agriculture Minister Radha Mohan Singh today. The total livestock population stood at 51.20 crore numbers in 2012, as against 52.96 crore in 2007 it said. As per the census data, cattle population has declined by 4 per cent to 1.90 crore in 2012 from 1.99 crore in 2007. Similarly, goat population has dropped by 3.82 per cent to 13.5 crore from 14 crore, number of bovines declined by 1.57 per cent to 29.9 crore from 30.4 crore and sheep population fell by 9 per cent to 6.5 crore from 7.15 crore in the review period. However the number of buffalo has increased marginally to 10.87 crore, while poultry population grown by 12.39 per cent to 72.9 crore in 2012. Some states such as Gujarat, Uttar Pradesh, Assam, Punjab, Bihar, Sikkim, Meghalaya and Chhattisgarh

have shown an increase in their total livestock population. Livestock Census in the country started in the year 1919 and since then the exercise has been continuing every five year. The data are being used for policy formulation and has wide utility in the field of planning and research activities. The data of 19th Livestock Census was compiled at the Central level by setting up data entry centers at selected States considering the volume of work.

Withdrawal of monsoon delayed, spells relief for farmers

The withdrawal of the monsoon, which should normally begin by September 1 from west Rajasthan, is delayed this year, cheering farmers with rain that's been patchy during the season. Meteorologists said the retreat was unlikely to begin over the next week with rains to occur in the north and northwest region of the country during the period. The four-month monsoon season, which runs from June to September, brings 70% of the country's annual rainfall. Over the past few years, the withdrawal has commenced in mid-September. "Since the past few years the withdrawal of monsoon from extreme north western parts of the country has been delayed. In the next one-two days, rains will continue in the region and we have to see the situation," said DS Pai, head of the longrange forecasting division at the india.



Meteorological Department (IMD) Pai said the rains will give temporary relief to farmers in Rajasthan, Punjab and Haryana. Last year, the monsoon started withdrawing from Rajasthan from September 9 and from Himachal Pradesh, Punjab, Haryana Gujarat by September 19. Meteorologists have said the monsoon is likely to end with deficit rainfall. In the past several years, the monsoon has started withdrawing only in the last week of September. In the past eight years, it has lingered on in northern India until as late as September 29 (in 2008). A week's delay in the retreat was normal, said GP Sharma, vice president of meteorology at private weather forecaster Skymet Weather Services. "Prevalence of dry weather for continuous five days and reduction in moisture content will be considered before announcing the withdrawal of monsoon," he said. The third condition for the retreat of monsoon is the setting of anti-cyclonic circulation over western Rajasthan in the low troposphere (at a height of 1.5 km). The complete withdrawal of the monsoon from the country takes place after October 1. The southwest monsoon made landfall on June 6 and extended over the country by July 17. Agriculturists said the late retreat was not a cause for

worry as the rain would help paddy, cotton and coarse cereals. According to the Met department's forecast until September 10, rainfall will occur at many places along the west coast and northwest India. On Wednesday, the seasonal deficit of the season narrowed to 15% with heavy showers covering most parts of the country. So far, the rainfall deficit has ranged between 5% and 13% in the southern, eastern and central parts of the country, while in the north and northwest the shortfall was 33%. In Punjab and Haryana, the seasonal deficit was at 64%, followed by 58% in west Uttar Pradesh. The Marathwada region and Telangana had a seasonal deficit of 37%. India receives an average 890 mm rainfall during the June-September period that is pivotal for the country's rural economy. Monsoon rain is vital for India as 55% of the arable land depends entirely on rain for irrigation. While agriculture accounts for only about 15% of the economy, the monsoon has a wider impact because it affects millions of people in villages, and weak rainfall can raise food prices.

DECCAN Chronicle

Farmers await loan waiver

This kharif season has pushed both the bankers and farmers into an uncertain position. Though north coastal Andhra receive bountiful rains this season, the farmers are not in a position to invest on crops as they are not getting loans from banks. At the same time the regulations are not permitting the bankers to give loans to the debtors. The bankers are advising the farmers to repay the loans which they have already taken and receive fresh loans. On the other side, farmers are waiting for the loan waiver scheme to get rid of the burden. As per the agriculture department records, 2,45,366 farmers have taken around Rs1,215 crore as crop loan and 1,29,550 farmers have taken Rs1,170 crore as agriculture gold loans last year. At present, the bankers are in a dilemma and they are not in a position to take a decision on loan applications. Apart from paddy, sugarcane and maize are the major crops in the district.

Farmers offer land to build Gannavaram airport

The long-pending issue of expanding Gannavaram Airport is to be materialised soon as farmers are showing positive response in offering their lands for the project. Farmers led by MLAs Gadde Rammohan and V. Vamsimohan and Bandar MP K. Narayana Rao met Chief Minister N. Chandrababu Naidu on Wednesday and suggested two options for offering their lands for airport expansion. The farmers demanded Rs1 crore per acre or on a 60:40 development basis. After giving a patient hearing Mr Naidu asked farmers to opt for 60:40 development which includes 60 per cent of the land to government and 40 per cent to farmers as it would benefit them more since the area will develop manifold. The farmers were said to have responded positively to the Chief Minister's suggestion. If the option of the farmers is materialised the decades-old issue of airport expansion would be a reality. AAI authorities too are ready to develop the airport. The AAI has to expand the runway

from the existing 7,500 feet to 10,500 feet for the landing of big aircraft. AAI officials are also expecting an increase in the number of flights with the expansion of the airport. The government has to acquire nearly 500 acres of land for the project.

40% increase in flower prices

The Coimbatore flower market is awash with colour and fragrance. As the city households get ready for the Onam floral carnival, about 200 tonnes of different varieties of flowers flooded the flower market on Wednesday. This is a whopping increase of 170 tonnes of flowers, compared to the 30 tonnes that arrive on normal days. The heady fragrance of roses, jasmines, champas and marigolds pervaded the market in Coimbatore which has a considerable Malayalam-speaking population. As the demand for the colourful blossoms soar ahead of Onam, their prices have also spiked up by at least 40 per cent. Coimbatore Flower Market Association (CFMA) treasurer K.K. Ayyappan said the orange and yellow sendumalli, used in large quantities to create the poo kalams, is now sold at Rs 60 a kilo, against Rs 40 in normal times. "There is an average 40 per cent increase, compared to the prices two weeks ago." Chrysanthemum or the common samanthi, now costs between Rs 80 and Rs 200 a kg depending on quality. Fragrant champas or sampangis are priced at Rs 200 a kg, vadamalli is sold at Rs 20-Rs 30 per kg depending on quality. The regular rose coloured arali or oleander has gone up to Rs 120 per kg whereas the white and red ones cost Rs 200. According to Ayyappan, the flowers are sourced from Alandurai and Thondamuthur in the city and from Hosur, Dharmapuri, Krishnagiri and Bengaluru. "We get arali mostly from Dindigul district. Jasmines from Sathyamangalam are sold at Rs 400 a kilo due to the festival demand," he said. Roses, used to decorate the borders of the poo kalams have gone really pricey at Rs 120-Rs 160 a kilo. "Five varieties coming from Hosur are in great demand the little ones in yellow, pink and red colours. The Taj Mahal rose is also in demand; it is priced at Rs 200 for just 20 flowers," said CFMA secretary A. Ansari. He said a bunch of 100 ordinary roses are now sold at Rs 70. Traders say they have also received orders from Malayali traders in Muscat, Doha and Bahrain.

Indian Meteorological department plans to make micro-level forecasts

With the rising need for micro-level forecasting, the Indian Meteorological Department (IMD) has embarked on a mission to develop forecasting specific to every three kilometres rather than the present 27 kilometre range. S.B. Thampi, deputy director-general of meteorology, Regional Meteorological Centre, Chennai said that IMD would first come up with a nine-kilometre forecasting pattern after which it the final three-kilometre forecasting method would be drawn up. "We need lot of data to study the climate pattern for micro-level forecasting and with data from several private players like Kea Weather and institutions like Sathyabama University we will be able to do micro-level forecasting within six years," he said in an informal chat with Deccan Chronicle after inaugurating techno-summit at Sathyabama University on Wednesday. Listing the projects planned in the 12th Five-year plan period, the deputy director-general said that IMD would set up 34 Doppler weather radars (DWR) in the country, including at Ramanathapuram and Karaikal. "By November this year the DWR in Karaikal will get operationalised and at Ramanathapuram we will start

construction work soon as land has already been acquired,” he said. Adding that IMD would use information-communication technology (ICT) for faster dissemination of its weather forecasts, Mr Thampi said that IMD would send short message service (SMS) to inform people about weather conditions. Earlier in his inaugural address, Thampi exhorted students to come up with out-of-the-box ideas that would help the society. “Why not you (students) start a climate corporation in India on the lines of Climate Corporation of USA to work on global climate change and also do climate insurance,” he asked.