New technique to cultivate red gram introduced

Steps to popularise cultivation among farmers in south

KNOWHOW:Cultivation of red gram being demonstrated at Kadayanallur.

The Department of Agriculture has introduced a new technique in raising red gram in the fields, which ensures increased income for the growers.

Red gram, also known as pigeon pea, is an important pulse crop of India and is being cultivated on 35.60 lakh ha across the country.

Among total pulses, the red gram, a protein rich staple food, accounts for 14.50 per cent in area and 15.50 per cent in productivity. Maharashtra is the largest producer with approximately 10.51 lakh ha with an average productivity of 6.03 quintal per ha.

It contains 22 per cent of proteins which is almost three times as that of cereals and it supplies a major share of protein requirement of vegetarian population of the country.

Since the cultivation of red gram as a ‘pure crop’ is not widely practised in Tirunelveli district and in order to popularise the cultivation of the crop among the farmers so as to help farmers obtain
an increased income from red gram cultivation, the Department of Agriculture has come out with a new technology called ‘Red gram transplanting.’

Under this scheme, 50 red gram demonstration plots with input subsidy of Rs.5,000 per ha are being created in the farmers’ fields by the Department of Agriculture in the district during the current fiscal. In a technology demonstration meeting organised at Kadayanallur recently, raising of red gram seedlings in portrays or polythene covers, transplanting, earthing-up, di-ammonium phosphate spraying, NAA spraying (Napthalene Acetic Acid) to induce profuse flowering etc. were explained to the farming community.

Joint Director of Agriculture, K. Soundararajan said that red gram, being an important nitrogen fixing crop, can be widely grown for enriching the soil.

“Its deep penetrating roots help in bringing nutrients from deeper layers of soil. With an effective rhizobium nodulation, it can fix up to 160 – 200 kg of nitrogen per ha per year. Falling of leaves before maturity ensures sufficient incorporation of nitrogen and other nutrients in the soil, which will be beneficial to the subsequent crop. Nitrogen fixing potential of red gram makes it an ideal intercrop or rotation crop in organic management,” he said.

The Joint Director of Agriculture also inaugurated the raising of red gram seedlings in portrays, which can be transplanted in the main field after 20 to 45 days.

“Farmers can easily get the yield of 2,500 kg per ha by following this method in red gram cultivation when compared to the conventional yield of 1,000 kg per ha,” Mr. Soundararajan said.

District gets ready for samba cultivation in 60,000 hectares
Tiruchi district is getting ready for samba cultivation in 60,000 hectares. According to a release from Collector Jayashree Muralidharan seedlings are being prepared for the purpose.

Under the Chief Minister’s special scheme for improving the samba area and productivity, which is being implemented at a cost of Rs.3.46 crore, community nurseries have been raised in 750 acres and seedlings distributed free of cost to 5,579 small and marginal farmers in the delta region to take up samba cultivation in 9,375 acres.

Besides, more than 581 metric tonnes of certified seeds of high-yielding varieties like White Ponni, AST 19, ADT39, Co®49, Co®50 and BPT 5204 have been stored in the block agricultural extension offices. Of that as much as 555 MT has been distributed.

While inputs to the tune of Rs.3,000 are given as subsidy per hectare under the National Agricultural Developmental Programme for promoting System Rice Intensification method, farmers are being given Rs.5 per kilogram of paddy seed through all the agricultural extension centres and primary agricultural co-operative banks.

In addition, it has been targeted to distribute chemical fertilizers with 25 per cent subsidy (worth Rs.1,125) for 6,800 hectares. This subsidy would be disbursed as and when the fertilizers are purchased from the primary agricultural cooperative banks.

**Krishi Vigyan Kendra plans ‘Technology Week’**

Krishi Vigyan Kendra will be organising “Technology Week” from Wednesday to Saturday on its campus. The programme aims at making people aware of the technological advances made in the fields of agriculture, pisciculture, and animal husbandry.

A Farmers Awareness programme on "Agriculture in Business mode" will be held on Wednesday. Farmers Awareness programme on the theme “Animal Husbandry in Business Mode” will be held on Thursday.

**Workshop**

A training workshop on the theme “Protein-rich-value-added products with an emphasis on women and children” will be held on Friday and a seminar on urban farming would be conducted on Saturday.
Interested may contact Raj Narayan, Programme Coordinator, KVK (ph: 9766448827) or V.Y. Gaonkar, Subject Matter Specialist (Horticulture (ph: 9422643739) on or before Wednesday.

CM thanked

Members of Tamil Nadu Government Agricultural Graduates Association thanked the Chief Minister and Agriculture Minister for the promotions announced to the officials in many ranks.

According to a release, state president T. Stanli said that the members are enthused by the recent promotional opportunities offered by the government.

84 villages go in for SRI method

System of Rice Intensification (SRI) method of cultivation has been taken up by farmers in 84 villages in Thanjavur district for this samba season. In SRI method, water requirement is less as seedlings are raised on plastic sheets upon which soil is spread and can be transplanted within 14 days of sprouting. Forty per cent of water can be saved under the method.

Farmers could be seen raising seedlings and transplanting them in various villages in the district. Arun Pandiyan, a farmer of Kalimedu village in Thanjavur block, has raised seedlings under SRI method for transplanting it on 68 acres.

M.Z.Mohammed Yahiya, Joint Director of Agriculture, and K.Nedunchezhiyan, Assistant Director of Agriculture, said that total village concept is followed for cultivation under SRI method, through which the entire village will come under SRI cultivation.

Six villages in each block in the district have been selected for trying out the method. Under SRI method, 7.5 kilos of seeds is needed for an acre of land.

Yield will be higher than normal yield, Mr.Yahiya said. Government has included SRI method of cultivation in the samba package.

Farmers asked to sell sunflower seeds

Since there is no scope for price of sunflower seeds to increase, farmers are asked to sell them immediately without storing.
The Domestic and Export Market Intelligence Cell of Tamil Nadu Agricultural University has made the forecast based on the prevailing price of sunflower seeds for the last 11 years at the Vellakovil Regulated Market.

The price of seeds is expected to hover around Rs. 40 to Rs. 42 in October-November. Despite the festival season, good arrivals and imports will curtail the price rise of seeds and there is no scope for price to increase in the next two to three months.

**Down to earth**

All through the bus journey back home, I dreamt of buying a piece of land to grow my own food. I would raise goats and cows and live amidst green fields and breathe pure air. I would lead a disease-free life and even give back something to society. Three days with Dr. G. Nammalvar had done this to me.

The 74-year-old agricultural scientist was part of a team led by environmental activist Dr. Vandana Shiva that was responsible for the European Patent Office revoking a U.S. firm’s claim to patent neem. An advocate of natural pesticides such as ‘Panchakavyam’ and ‘Amitha Karaisal’, he assisted farmers in Nagapattinam district as well as in Indonesia to rehabilitate their land after the 2004 Tsunami.

He is well-known for his campaigns against chemical-free agriculture... but these are just a few instances from the life of a man who has dedicated his life to popularising natural farming practices.
I first saw him at the thatch-roofed enclosure of Vanagam, his 55-acre organic farm at Kadavur, a mountain village near Karur in Tamil Nadu. Seated on a mat, he was addressing some 20 people who had signed up for the three-day organic farming training camp. They came from various backgrounds. There was an engineering student who wanted to restore a polluted pond in his neighbourhood, an IT professional who wanted to become a farmer, a marketing executive who wanted to explore the commercial aspects of organic farming…There were also other farmers who were looking to step into organic farming.

**Grow just enough**

“Say you have 25 acres of land,” began Nammalvar. “Set aside just enough of it to produce food for you, your family and cattle and plant trees everywhere else. New leaves will grow every day; they will fall on the land and make it fertile. Your cattle can feed on the grass that grows between the trees; they will get to graze in an air-conditioned environment. Birds will sit in the branches and sing. There will be new songs and new colours every day. There will be food all through the year. Most importantly, you needn’t plough and till every day.”

As the afternoon wore on, the sky turned grey. There were heavy gusts of wind and it began to drizzle. For Nammalvar, with rain, came laughter and poetry.

“Look at the trees dancing. Even Bharathanatyam dancers cannot come close to their movements,” he said, grinning behind his white beard.

**Field work**

The next day, I stepped out at 5 a.m. and the cold air from the mountains chased away the remnants of sleep. I assumed it was just me and the roosters who were up at that hour. But, Nammalvar had already started work. He was carrying water for the newly planted saplings. He set the tone for the day; it was to be spent in the fields.

With the sun high in the sky, we planted millet seeds in an area under cultivation using the *vatta paathi* method. As the afternoon wore on, we watered the seeds. I revere those moments, for out there, we became the creators. Imagine how a farmer must feel at the time of harvest!
Discussions followed every activity during the workshop, that included documentary screenings, games, and lectures. Nammalvar managed to make even the shyest of students speak. We learnt that when fish waste is mixed with country sugar and set aside for 21 days, we get a harmless fertiliser that also helps plants fight drought. A mixture of coconut milk and sour buttermilk can stimulate plant growth. Senthil Ganesan, Ayyappan, Kannadasan and Jothi, the staff members of Vanagam, demonstrated how these mixtures, that were kind to the soil, were made.

**Transformation**

We practised double digging, an organic farming technique where cultivation is done on a raised bed of soil. With just a few hours for the sun to set, we walked to the vegetable patch with sickles and seeds and sacks of mulch. We saw the field change before our very eyes — what was once flat and covered with grass was now well-turned and healthy looking with all the mulch and fresh dose of topsoil.

We dug out earth around the bed to make a walking path. This path gives you access, makes the ground firm and prevents you from stepping on the plants.

With Nammalvar around, even a mundane task as cutting grass becomes interesting. He is a storehouse of stories and working alongside him in the fields is the best way to hear them.

“This grass is for our two pregnant cows,” he said, as we cut grass. “We take the two aside before we feed them. Otherwise, the other cows will be disappointed if they are not given the same fodder.” ‘Periya Pasu’, he explained, was his favourite cow. “She is beautiful to look at. You should see the way she opens her mouth nice and wide when you feed her.”

Tired and dusty, we settled down to watch documentary films that evening. The last day was all about feedback, plans for the future and goodbyes. But more than all the talks, discussions, and hours of fieldwork, it is the experience of being around Nammalvar that makes Vanagam so special.

“Sometimes, trees talk to you,” he said one morning. “When you spread mulch at their base, the leaves will nod a thank-you. Cows bend their head low, in a gesture of gratitude when you feed them. They all speak, but not in Tamil.”
Gracious at work... from farming to writing his 123rd book

He is now working on a guide on general studies for Civil Service aspirants.

Quite a collection: Farmer-turned-writer Gracious Benjamin with the books penned by him.

Half the books in the wooden shelf at Gracious Benjamin’s house are authored by him. The 48-year-old farmer-turned-writer has penned 122 books on subjects ranging from farming to science to history. Now, he is working on a book on general studies for Civil Service aspirants. Gracious stands out because he is a Class-X pass.

“I used to pass on farming tips to many agriculturists. They found them useful and asked me if I could write a book on organic farming. I interviewed many farmers and Vidyarthi Mithram Publishers brought out the first book — a 200-page one on guidelines for farming called ‘Karshika Guide’ — in 1999. The book was well received and that gave me the confidence to explore more topics,” says Gracious, who hails from Kattachalkuzhi near Vizhinjam here.

Net savvy

As his range widened, Gracious had to depend on the Internet more and more. This meant he had to enter the alien world of computers and more importantly, master English language.

“Patience and willingness to learn can pay off,” says Gracious. Slowly, steadily, he learnt the new technology, and came up with his first book in English ‘Easy English.’

‘Charitra Vijjana Kosham,’ Science Master series, rank files of competitive examinations, and ‘Krishi Vijjana Kosham’ are among the books penned by him. He has written 450-odd articles in leading newspapers, has scripted for a few agriculture-based programmes for All India Radio, and has won the Karshaka Bharati Award (2002) for the best farm journalist.
Gracious admits that his latest endeavour, of preparing a guide for one of the toughest competitive examinations, is a bit daunting. “A lot of work has to be done. I dedicate all my time to writing,” adds the writer who finds joy even in collecting the empty refills of the many pens he used. His profile may not change but with his passion for writing, he will most definitely have to find a bigger shelf.

**Hike copra procurement price: sabha**

All India Kisan Sabha State general secretary Satyan Mokeri has demanded that the State and Central governments should initiate urgent steps to hike the procurement price of copra to Rs.7,000 a quintal and that of husked coconut to Rs.2,500 a quintal.

In a statement here on Tuesday, Mr. Mokeri said the Kisan Sabha would organise marches and dharna in front of the Secretariat and other select centres in districts on October 5 demanding steps to help the coconut sector and the farmers.

**Falling price**

Pointing out that the price of coconut had fallen to around Rs.3 from Rs.6 that it commanded last year, Mr. Mokeri said comprehensive development projects were essential in the coconut cultivation sector, apart from taking steps to expand the international market of coconut products.

Subsidies similar to those offered to palm oil farmers had to be extended to coconut oil producers too, Mr. Mokeri said.

**Farmers want Rs. 25 for a litre of milk**

Dairy farmers have urged the Karnataka Milk Federation (KMF) to pay them Rs. 25 for a litre of milk. Members of the Ramanagaram District Dairy Farmers’ Welfare Association staged a protest here on Tuesday. Association president Hanumanthe Gowda P.N. said, “They should give us Rs. 25 a litre excluding the Rs. 2 grants given by the State government.”— Staff Reporter
As part of its endeavour to meet farmers' demand for DAP during the current samba season, the Indian Farmers Fertiliser Cooperative Limited (IFFCO) has brought 2,653 tonnes of DAP from its manufacturing unit in Paradeep in Orissa on Monday.

The stock had been supplied to all the cooperative societies through the Tamil Nadu Cooperative Federation (TANFED).

The effort will eliminate any scarcity of DAP during the course of irrigation of samba crop during this ‘Rabi’ season, D. Subramanian, Chief Area Manager, IFFCO, Tiruchi Region, told presspersons here on Tuesday.

He said that 400 tonnes has been allotted to Pudukottai district, 200 tonnes for the composite Perambalur district (Perambalur and Ariyalur districts) and 100 tonnes for Karur district.

The balance 1,953 tonnes has been allotted to Tiruchi district.

“Timely action has been taken as an estimated 15 lakh acres would be brought under samba cultivation simultaneously in this region,” Mr. Subramanian said.

A. Elango, Marketing Officer, TANFED, who was also present, appealed to farmers to get the DAP from their nearest cooperative society.

Plan to import 70,000 tonnes of fertilizer

Mr. Subramanian said the IFFCO has chalked out a plan to import 70,000 tonnes of fertilizer to meet farmers' needs during the ‘Rabi’ season (October 2012 to March 2013).

Steps had been taken to import 30,000 tonnes of urea from Omen for the Tiruchi region.

On IFFCO's achievements during the recent 'kharif' season (April to September 2012), Mr. Subramanian said that 19,500 tonnes of DAP and complex urea had been supplied to farmers.

About 12,000 kg of water soluble fertilizer was also marketed which was widely used for foliar spray.
“The foliar spray was not only economical but also proved its efficacy in terms of crop protection strategy and higher yield,” he said.

Thanks to rains, farmers reap benefits of direct sowing

With rain gracing the area in the evenings, direct sowing has caught up well among farmers of Thanjavur district. Against a target of 20,000 acres to be covered under direct sowing for this samba season, 8,163 acres have been covered so far in the district.

Farmers of Pallieri village near Thanjavur have gone for direct sowing this year.

They have been doing traditional transplanting in the previous years. This year due to water shortage they have decided to go for direct sowing. All the farmers in the village have gone for direct sowing on 103 acres of land in the village. Arul Mary, a farmer, was seen sowing seeds to fill the gaps in the field where she had done direct sowing, on Monday. She holds one acre of land. "I have done direct sowing in my land and also in the land I have taken for lease,” she said.

Kinson is yet another farmer of the village who has done direct sowing on four acres of land. Seeds started sprouting and with one or two spells of rain, crop will grow, he said. Much to the convenience of farmers, the area has experienced copious rains in the evenings. In some places, water has got stagnated and farmers were seen draining water from the fields.

Canal water has also reached Thanjavur district after Mettur dam was opened on September 17 and Grand Anicut on September 21.

Under direct sowing, seeds are sown and allowed to grow with the help of rain water. Farmers of Pallieri village have sown BPT 5204 variety of paddy. It is expected to mature in four months time.

M.Z.Mohammed Yahiya, Joint Director of Agriculture, and K.Nedunchezhiyan, Assistant Director of Agriculture, said that target of 20,000 acres can be achieved. In Thanjavur block, target is 2,250 acres and so far direct sowing has been done on 1,397 acres.
Farmers are given subsidy for ploughing at the rate of Rs.480 per acre. Weedicide is given at 50 per cent subsidy. Seeds are given at Rs.10 subsidy per kilo. For an acre of land, a farmer needs 30 kilos of paddy seeds and a farmer gets Rs.300 as seed subsidy for an acre.

Direct sowing has been taken up in all blocks-Budalur, Thiruvaliyaru, Orathanadu, Thiruvonam, Pattukottai, Madukkur, Peravurani, Sethubavachathiram, Papanasam, Ammapettai, Kumbakonam, Thiruvidaimaruthur and Thiruppanandal. It has been planned to raise samba on 1 lakh hectares in the district. It will be done through direct sowing, SRI method, and community nurseries.

**Training to farmers**

Dairy farmers and cattle rearers in Madurai district are able to procure only 25 per cent of the green fodder required for their cattle. This shortage was resulting in an increased dependence on expensive concentrate feed, which was proving to be a drain on their income.

Taking into account the worsening availability of fodder and the increase in dairy animal population, National Bank for Agriculture and Rural Development (NABARD) has tied up with Veterinary University Training and Research Centre at Tirupparankundram near here to impart training on scientific cultivation of green fodder to farmers.

R. Shankar Narayan, NABARD Assistant General Manager, told *The Hindu* that dairy farmers were forced to spend 70 per cent of their total expenditure on concentrate feed sourced from the markets. This initiative would help farmers cut down costs and improve yield.

The training programmes, which began last week, would initially be imparted to 90 farmers drawn equally from the villages of Vedanpuliankulum, Koothiyarkoondu and Rengasamypatti in the district. The selection criteria were that the interested farmers should have 25 cents of land and two milch cattle. The training is under Micro Entrepreneurship Development Programme.

**Farmers asked to sell sunflower seeds**

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**Water reaches Biligundlu**

The initial flows of Cauvery water released from the Krishnaraja Sagar (KRS) dam in Karnataka reached Tamil Nadu at Biligundlu on Monday evening. The water level increased from 3.600 metres at the measuring point to 4.060 metres, Central Water Commission sources said here on Tuesday.

Following the latest order of the Supreme Court, the water release began on Saturday midnight, leading to protests in Karnataka and the suspension of inter-State traffic for two days.

The sources said the water flowing into Tamil Nadu was little more than 9,000 cusecs.

The water flow gradually increased in Biligundlu, 190 km downstream KRS dam, and touched the 9,000 cusecs level in the early hours of Tuesday.

It is expected to reach Mettur dam through Hogenakkal on Tuesday night or in the early hours of Wednesday, sources here said.

At 4 p.m. on Tuesday, Mettur recorded an inflow of 9,222 cusecs.

Peace prevailed on both sides of the border. The vehicular movement was normal. However the district police are maintaining strict vigil along the border, sources here said.
The columns show maximum and minimum temperature in Celsius, rainfall during last 24 hours (trace) and total rainfall in mm since October 01, 2012.

**Rainfall at most places over coastal A.P.**

**CHENNAI:** Southwest monsoon has been vigorous over coastal Andhra Pradesh and Telangana.

Rainfall occurred at most places over coastal Andhra Pradesh and Telangana, at many places over coastal and north interior Karnataka and at a few places over Rayalaseema and Kerala. Isolated rainfall occurred over south interior Karnataka. Mainly dry weather prevailed over Lakshadweep.

Palayamkottai recorded the highest maximum temperature of 39 deg Celsius in the region.

Chamrajnagar recorded the lowest minimum temperature of 18 deg Celsius in the plains of the region.

**FORECAST (valid till Thursday morning):** Rain or thundershower would occur at many places over Andhra Pradesh and Karnataka and at a few places over Kerala and Lakshadweep.

Isolated rain or thundershower may also occur over Tamil Nadu and Pondicherry.

**Heavy rainfall warning:** Isolated heavy rain would occur over Andhra Pradesh and Karnataka during next 48 hours.
Here is some good news for farmers in Madurai district: a latest facility at the State-run regulated markets in Madurai, Tirumangalam, and Usilampatti is a ticker board that works on a SIM card and displays both the spot rate and the futures prices of different commodities. Farmers can now have access to prices at their doorstep.

Till some time ago, the future rates were confined to precious items such as gold and silver, but now, the importance had been extended to the agricultural produce as well, said J. Thavasa Muthu, secretary, Madurai Market Committee. “By having the latest prices for the goods in hand, farmers cannot be deceived due to ignorance of its value in markets. They are no more in the dark about the current market prices,” he said.

Explaining the salient features of the new facility to a group of farmers at the Tirumangalam regulated market on Monday, Mr. Thavasu Muthu said that from now on they could get a better price and keep track of the fluctuations. Depending on the need, they could sell their produce and need not rush to the markets. Similarly, the tactics of middlemen in influencing the farmers to sell their produce may become a thing of the past as the spot rates for the goods would be made known.

Mr. Muthu, who attended a two-day training programme organised by the NCDEX (National Commodity and Derivatives Exchange Limited) in Mumbai recently, said that through the exchange agency that handled the futures market, the rates were made available to farmers at
the regulated markets. “Benefits of satellite technology are being passing on to farmers, besides educating them on market nuances,” he told *The Hindu*.

A farmer from Sathangudi near Tirumangalam expressed satisfaction over the new facility and hoped that they would no more be at the mercy of greedy merchants. The regulated market which functions on all working days would have officers to assist farmers seeking information.

**Villagers go green to bring back the rain**

Standing on a hillside in the sleepy village of Karunapuram, one can feel the heat waves lashing from across the Tamil Nadu border. This village on the Western Ghats has been experiencing drought-like situation for the past couple of years.

Wells and streams here have dried up, severely affecting agriculture — the main source of income for the people here.

As per official estimates of the grama panchayat, there are around 6,000 bore wells here, a large figure for a panchayat area. People still dig new ones in the hope of meeting their drinking water needs.

**Dry wells**

“Most of these bore wells yield no water,” said panchayat president Marykutty Joseph. People dig new bore wells when the existing ones stop giving water.

There was strong opposition when the panchayat enforced control over digging bore wells as it had supposedly caused the severe drop in groundwater levels.

The measure has now been rolled back. Ms. Joseph said that there was a trend of migration in the village since the drought-like situation began.

Elders in the village say that the dry spell is due to the loss of the green belt in the entire eastern part bordering Tamil Nadu – from Cumbommettu to the tourism spot of Ramakkalmedu.

The tree cover cooled the rain clouds moving across the eastern side, which helped the seasonal rains.
As per the panchayat estimate, the village used to get 200 mm rain, which fell down to half or even less now. This season, the village experienced only nominal rains, which also completely eluded some rain shadow areas.

With agriculture hit severely, the panchayat is taking up long term efforts to restore the green cover. In association with the social forestry wing of the Forest Department, a mega National Service Scheme (NSS) camp was held recently and around 20,000 tree saplings were planted.

“Rebuilding the green belt is the highest priority now,” said Ms. Joseph.

The second phase of the green project has started with the participation of NGOs. Green Leaf, an NGO that is on a drive to create bio-diversity parks in all the college campuses of Mahatma Gandhi University, has extended the scheme to the schools in this village too. C.P. Roy, a member of Green Leaf, said that maintaining the planted saplings is a huge effort. The saplings planted are, therefore, of trees that grow quickly. Follow-up action and maintenance of the saplings will continue for two more years, he said.

State Bio-Diversity Board chairman Oommen V. Oommen, who recently visited Karunapuram, told The Hindu that how climate change had affected the bio-diversity of the area in the Western Ghats could not be exactly calculated.

“However, climate change has a direct impact on bio-diversity and the ecosystem. Only a proper study will reveal the exact impact on these,” he said.

Plea to stop field trials of GM crops
The need for stopping all open field trials of GM crops in the country and enacting a domestic legislation on liability and redress of LMOs (living modified organisms) has been voiced by civil society organisations here on Tuesday.

At a press conference here on the sidelines of the ongoing sixth meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety, G.V. Ramanjaneyulu of the Centre for sustainable Agriculture, Sridhar Radhakrishnan, Convener, Coalition for a GM-Free India, and Shalini Bhutani, legal expert, said the nation would be put to risk with the introduction of GM crops.

They said the bio-safety regulatory bodies from the State to district levels were not functioning properly and trials were approved even in ecologically fragile zones like Western Ghats. Instead of merely adopting a science-based approach while importing LMOs, they said the socio-economic impact on the communities should also be taken consideration. They wanted the government to adopt a pro-farmer approach while introducing modern agriculture technology.

Expressing concern over field trials of GM crops in a few States, they said that such trials could lead to GMOs (genetically modified organisms) entering the food supply chain and jeopardizing biodiversity.

They urged the government to enact a domestic legislation on liability and redress of LMOs even as India’s ratification of the Nagoya-Kuala Lumpur Supplementary Protocol to the Cartagena Protocol on Bio-safety was pending.

Biodiversity register

Among others, they sought creation of national biodiversity register and ensuring community rights, banning patents on any living forms and replacing the Biotechnology Regulatory Authority of India Bill with national bio-safety policy.

Policy implementation

Meanwhile, Charles Gbedamah, Head of Bio-safety, Convention on Biodiversity (CBD), said the implementation of Cartagena Protocol by various countries was tardy and expressed the hope that it would be implemented 100 per cent by all by 2020.
Various issues on bio-safety, including risk assessment on a science-based approach, capacity building, progress of the implementation of the protocol, handling, transport, packaging and identification of LMIOs were being discussed by the delegates.

**Dairy farmers urge KMF to pay them Rs. 25 for a litre of milk**

Dairy farmers have urged the Karnataka Milk Federation (KMF) to pay them Rs. 25 for a litre of milk. Members of the Ramanagaram District Dairy Farmers’ Welfare Association, who staged a demonstration in Bangalore on Tuesday, said they are now being paid Rs. 20 a litre.

Association president Hanumanthe Gowda P.N. said, “They should give us Rs. 25 a litre excluding the Rs. 2 grants given by the State government.” he said. The protesting association members said that because of drought in the State, dairy farmers were in distress and so loans taken by them from nationalised banks for purchase of cattle must be waived.

“We urge the government to order a probe into the allegations of irregularities by the KMF. Also, there is suspicion that milk is being adulterated in the KMF’s chilling centres by adding water. We demand that CCTVs be installed there,” Mr. Gowda added.

**Tea gardens boosted in Meghalaya**

Enjoying the natural advantage of abundant rainfall and fertile soil, Meghalaya is not only slowly catching up with Assam and Darjeeling in tea output, but has also started production of high-quality organic tea.
Though tea planters had identified the favourable condition in the region almost two centuries ago, tea cultivation was never taken up seriously by successive administrations.

During a visit to Meghalaya in 1974, the Tea Board delegation reported that the potential for tea cultivation was “immense” and suggested transplantation of tea varieties from Assam and Darjeeling in the state.

Varieties brought from the two areas were transplanted in experimental gardens at Umsning in Ri–Bhoi district, Tebronggre in West Garo Hills district and at Riangdo in West Khasi Hills district.

The quality and yields of tea in these experimental gardens prompted the state government to incentivize commercial cultivation of tea in private farmers’ farmlands. Now Meghalaya tea has earned a name for itself for possessing superior quality and rich fragrance.

**Acute labour shortage in dairy industry**

Is the dairy industry in the State facing shortage of labour after farming sector?

Yes is the answer from the officials of the Animal Husbandry Department.

Part of the farming community, dependent on dairy industry, has been demanding that immediate steps be put in place for the mechanisation of the industry.

This was the feedback from the farming community to the department officials who are conducting cattle census from September 15.

Almost half of the district is covered so far and the revelations are stunning.

In all the places, wherever the representatives of the department visited, farmers have been pouring out this problem of non-availability of labour.

**Suggestions**

Power operated chaff cutters, milk machines, water turfs to provide water during water shortage period, subsidy for silage making and treating the dairy sector on par with farming and offering
an interest-free loan of Rs. 5 lakh were some of the suggestions presented before the officials. However, a positive trend observed by the officials was that the black animal population - he buffalo, she buffalo, and calves - is considerably increasing in the district compared with earlier population by three percent. Similarly, graded population has increased to 35 per cent, compared with 20 per cent that was recorded earlier.

Even while the population of cows and bullocks decreased by one per cent, the cross-bread population increased by 20 per cent from the earlier recorded figures of 10 per cent. “We are facing new issues while collecting data for census. There are so many issues, including that of fodder shortage, being complained by farmers involved in dairy sector. However, a clear picture has been emerging showing a trend towards farmers opting for dairy which is increasing their revenues,” K. Lakshma Reddy, Joint Director, Animal Husbandry told *The Hindu*.

**Farmers want Rs. 25 for a litre of milk**

Dairy farmers have urged the Karnataka Milk Federation (KMF) to pay them Rs. 25 for a litre of milk. Members of the Ramanagaram District Dairy Farmers’ Welfare Association staged a protest here on Tuesday. Association president Hanumanthe Gowda P.N. said, “They should give us Rs. 25 a litre excluding the Rs. 2 grants given by the State government.”— Staff Reporter

**Golden Rice has very less Vitamin A: PANAP**

Who needs Golden Rice? That was one of the much debated subjects among civil society groups in the corridors of the HICC, venue of the ongoing world meeting on the safe use of Living Modified Organisms (CoP-MoP 6) here on Tuesday.

The genetically engineered rice with orange or yellowish hue has come in for criticism by civil society groups notwithstanding its promotion by rice scientists and International Rice Research Institute as a wonder grain packed with Vitamin A. A note brought out by Pesticide Action Network Asia and the Pacific (PANAP) argued that the level of Vitamin A in it was very low even
after continuous research for improving the level of beta carotene using corn as the source of genes for “Golden Rice 2”.

This was despite propaganda about the potential of this type of rice. The production of beta carotene (the precursor to the Vitamin A) in rice endosperm was made possible by inserting three foreign genes into rice, one from a bacterium and two from the daffodil. The PANAP wonders how such minimal level of beta carotene could be heralded as a solution to the blindness caused by Vitamin A deficiency.

It was a subject of debate between corporate scientists and farmers, consumers and development workers who contest it. Dismissing rice researchers’ views, the network claims Golden Rice cannot address the biological, cultural and dietary factors underlying causes of Vitamin A deficiency. Such deficiency is just one among a multiple set of malnutrition problems.

Instead of such fancy rice, a combination of food fortification and supplementation was still the most practical and economical approach to deal with communities afflicted with deficiency, the network says in the note.

Even Japan ill-prepared to check crop damage by GMOs’

Protocols aplenty are signed and ratified but how well-equipped are countries in tackling problems relating to the unintentional release of genetically modified organisms (GMOs) resulting in damage to native crops and biological diversity?

As developing countries like India grapple with such problems, even industrialised economies such as Japan have no easy answers as a group from that nation demonstrated at an interesting side event at the ongoing sixth meeting of the Conference of Parties serving as meeting of Parties (CoP-MoP 6) here on Tuesday.

Wild growth

Toshiki Mashimo and Michiye Koketu of the Consumers Union of Japan, through a presentation on contamination of local crops by genetically modified canola (rapeseed), laid bare the chinks in the armour of Japanase law governing such release. GM canola growing wildly has been found at many locations in Japan, mainly near harbours and on neighbouring roads, leading to
food oil factories posing a threat to local crops. Japan’s importing firms that get GM canola from North America, food oil companies that make canola oil and transporters are all directly responsible for such contamination.

In the normal course they should be held accountable to liability and redress, two key principles underpinning the latest Nagoya-Kuala Lumpur Supplementary Protocol, but the Japanese Government remains indifferent and helpless as the existing laws are inadequate.

**Trade ties**

“It is a different matter that trade relations among Japan and US and Canada may also deter the Government from acting tough. It is ironical that we hold big conferences like the fifth Cop-MOP in Nagoya but we are just unable to tackle such issues affecting local farmers and crops,” Mr. Mashimo told *The Hindu* later.

The Consumers Union, which ran a campaign collecting two and a half million signatures, is now lobbying for amending the Japanese laws not only “consistent with” international protocols but including provisions of precautionary principles and negative effects on biodiversity. The new legislation should incorporate bringing developer, producer and exporter into the fold of the definition of “operator”, redress system of financial compensation and actual restoration and civil liability system to cover damages caused by the import of GMOs.
Sonia Gandhi to kick-off Cong poll campaign in Gujarat

Congress President Sonia Gandhi will address her first rally on Wednesday in Rajkot, Saurashtra, where the BJP is pitted against a resurgent Congress and Keshubhai Patel's political outfit. Elaborate security arrangements have been put in place in the city, where Gandhi will kick off her This, according to the state leaders, is the first time since 2002 when Gandhi will address a rally in Gujarat ahead of the announcement of poll schedule.
The farmers’ rally at Rajkot would also be Gandhi’s first public meeting after the Congress-led UPA government decided to allow FDI in retail, hiked diesel prices and put a cap on subsidised LPG cylinders.

According to Gujarat unit chief of Congress Arjun Modhvadiya, Gandhi would also visit Ramkrishna Ashram and Bal Bhavan before addressing the gathering.

Congress managers have carefully chosen Rajkot — the fourth largest city in Gujarat — as the venue because it is part of Saurashtra, which is considered a BJP stronghold. The Congress, however, won four of the seven Lok Sabha seats from the region in 2009 polls. It also accounts for 48 assembly seats.

The party seeks to cash in on the farmers anger — they have suffered huge crop losses due to drought in the region — against the Modi government and remind them that it was UPA which announced a debt waiver of Rs. 70,000 crore for them in 2008.

"Our workers are excited about the rally…We expect a huge turnout," Gujarat party chief Arjun Modhwadia said.

"Sonia Gandhi will arrive around 10.30 am and go straight to 'Gandhi-Smruti', the place where Mahatma Gandhiji stayed during his school days," a Congress leader said.

Earlier on Tuesday, Gujarat chief minister Narendra Modi attacked Gandhi again, asking the central government to disclose the expenses made on her foreign trips since 2004, the year the UPA came to power.

With the Gujarat election dates likely to be announced today, this is seen by his opposition as Modi’s attempt to turn the campaign into a personality battle and gloss over local issues.

Addressing a youth convention organised by the state employment department, Modi said: “I am not asking the Congress president to provide the details, but I am asking the prime minister and the UPA government to provide them because it's public money.”

Stating he had received threats from the Congress for raising the issue, he said, “I am being threatened…if I seek expenditure account details, there will be serious allegations against me. They have already put the CBI behind me.” His words evoked strong protest from the Congress.
Congress general secretary Digvijaya Singh hit back at Modi, saying he (Modi) had been trained well by the RSS in “false propaganda”, and also compared him with German propaganda minister Joseph Goebbels of the 1930s and 1940s. “Sangh training to its cadre — tell a lie, tell it loudly and repeat it more often. Doesn’t it remind you of Hitler’s Goebbels?” Singh wrote on Twitter.

“Now Narendra Modi should tell in which newspaper he read and which news agency gave him this information. There is nothing to hide regarding Soniaji’s health and foreign trips,” Singh added.

The local Congress leadership has so far mostly focused its energies on local issues, highlighting the failures of the Modi government.

“Such deplorable remarks only show he cannot fight polls on the local issues,” said Gujarat leader of opposition Shaktisinh Gohil.

Butterly brilliant

He didn't like milk and he didn't drink it, he said in his last interview. I don't like milk either, but it gets a lot more interesting when the man speaking was probably more responsible for the milk that Indians drink today than anyone in history. Verghese Kurien was the Amul man, the sometimes called the 'White Revolution' in India. Milk production is one of India's great success stories. The per capita availability of milk in India has doubled in the last 50 years, despite the trebling of the population, and we have gone from being a milk-deficit country to one that exports milk powder, in the process changing the entire economics of the dairy industry and bringing a little bit of extra prosperity into the lives of the 11 million mostly poor people who are members of milk cooperatives all over the country.

Yet when he died a few weeks ago I was struck by the rather desultory way his death was reported in the English language press — cute headlines — 'India's milkman…' but short and lifeless stories. It was hard to avoid a comparison with Steve Job's sad passing almost exactly one year before. It is true that while Kurien was given ample time to look back on his achievements, Jobs was taken away at his prime, which obviously adds an extra tragic
dimension to his story, but the stories on Jobs were also much more concrete in their appreciation of his achievement (and much more unabashed in their adulation).

As a Mac user and someone who has spent many years lusting after iPhones and other pieces of technologically advanced jewellery that Jobs crafted for us, I have no reason to belittle his achievements, but it is worth asking whether it is inherently more difficult to appreciate innovation when it changes the process rather than the product.

Think of the problem that Kurien had to solve: a lot of the milk in India comes from dairy farmers who have just a few cows — often just one cow that is giving milk at any point of time. And they usually live in places that are many miles from the nearest small town and often hundreds of miles from the state capital or other major metropolitan centre, which, given the quality of rural roads in the 1950s or even the 1980s, would mean many hours of travel to take the milk to the market. At the temperatures that are normal in much of India for most of the year, this would obviously risk spoilage unless the milk was refrigerated, but how could it make sense for someone with a few litres of milk to sell to buy a refrigerated truck (even if they could afford one). Unfortunately the alternative was selling the milk in the village, where lots of people had cattle and few wanted more milk.

At one level there was nothing particularly surprising about the solution: get all the cattle owners from the village to bring the milk to a single collection point in the area from where it could be shipped out together. The challenge was in getting all the details right: what do you do with the milk that has been collected while waiting for the rest of the village to bring in theirs? Chilling the milk would save it from spoiling while they waited, but how do you chill milk if there is no power connection (in the 1950s and 60s very few Indian villages had electricity). How do you get the cattle-owners information about the necessary injections, the latest feed or the right kind of mates for their cows? Or at a more mundane level, how do you make sure that the collection points are open when the farmer shows up with his milk and that the truck to take the milk to the processing plant is not late? More generally, how do you build a brand with a reputation for quality based on the production of a thousand independent cooperatives, who must all be tempted to dilute their milk?

And remember all of this had to work, and work well, in more than a hundred thousand villages from Gujarat to West Bengal. Any slippage could be very costly if it made some farmers lose
faith and stop bringing in their milk, or if buyers started questioning the product — the whole system, based on strength in numbers, would then start to unravel.

It is true that Kurien, as the chair of the National Dairy Development Board, did not actually run most of these cooperatives — but then how often did Jobs visit the Apple factories in China? Like Jobs, Kurien had to produce the right prototype that could then be replicated many thousand-fold. Unlike Jobs, his prototype could not be replicated in a single large factory but had to be robust enough to be recreated village by village in a hundred thousand villages.

The point here is not at all to minimise what Jobs accomplished — there were just so many good ideas, from the Apple II to the iPad, and there was a perfection to them that could not have been even an option for Kurien. In a sense it is precisely this imperfection, combined with the sheer mundaneness of much of what it takes to make things work on the ground (how many milk pick-ups a day, Zaffarabadi cows or Surti cows, and so on…), that makes it challenging to identify and support (and write about) the great innovations that change the lives of the poor. But Amul has done so much more for the lives of the average Indian than Apple that we cannot afford to not take up the challenge.

*Abhijit Banerjee is Ford Foundation International Professor of Economics and Director, Abdul Latif Jameel Poverty Action Lab, MIT. The views expressed by the author are personal.*
Loss of genetic diversity is irreversible: Scientist

Can transgenes move from crop fields to natural landscapes? This question has been bothering a section of Scientists and Non-Governmental Organisations for long. This, they argue, could adversely impact the biological diversity.

“Unexpected and unwanted transgene out-crossing and their spreading in native and indigenous crops has been observed in several cases in the last few years. Indigenous organisations, conservationists and regulators have been working on options to prevent such transgene spread,” organisers of a side event at the Convention on COP-MOP-6 (Cartagena Protocol on Biosafety), said.

Cynthia L Sagers of University of Arkansas (the US) has done a research on vast stretches of canola growing areas in North Dakota State.

“Are effects of GM crops limited to crop fields,” was a major focus of her study. Presenting the findings at the COP-MOP-6 on Tuesday, she found flow of herbicides (sprayed from aircraft) along the wind flow and away from the targeted crop area.

She called for efforts to limit release to species confined to cultivation and prohibit release when crops are sympatric with sexually-compatible relatives. She also called for close monitoring of transportation routes and funds to carry on basic research in crop-wild hybrids.

Anna Wegier of National Institute for Research in Agriculture, Forests and Livestock (INIFAP) of Mexico, pointed out that there are no biosafety measures that work for all species alike. Each of them would need a different set of measures.

“Any loss of genetic diversity is irreversible,” she warned.
Agri commodities seen under pressure

Agricultural commodities are seen under pressure in commodities futures market on Wednesday, taking cues from global markets and trends in the spot markets.

Oilseeds and edible oils are likely to drop, weighed by developments on the global soyabean markets and Malaysia palm oil market that dropped to two-year low earlier this week. Grains are seen dropping on better than anticipated yields of US wheat and soyabean, besides their arrival in the country.

Gold prices could look to currency for movements, though they could be lower at the opening going by trends in Singapore. Spot gold prices were near 11-month high in Singapore on Wednesday morning, although the drop was marginal to $1,773.10 an ounce.

Metals have little scope to progress due to chances of weak economic growth. Factory data from China and Japan that showed tardy growth earlier this week will continue to cast their shadow.

Karnataka banks focus on farm loans, small firms

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<th>BANKS' PERFORMANCE</th>
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<td>Parameter</td>
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<tr>
<td>Business</td>
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<td>Agricultural advances</td>
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<td>MSME Advances</td>
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<td>Education loans (outstanding level)</td>
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<tr>
<td>Deposit growth (%)</td>
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<td>Credit growth (%)</td>
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<td>Source: SLBC Karnataka</td>
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Karnataka is the place of origin of many public and private sector banks. Four public sector banks – Canara Bank, Corporation Bank, Syndicate Bank and Vijaya Bank – originated from coastal Karnataka. This includes the present Dakshina Kannada and Udupi districts.

State Bank of Mysore, an associate bank of State Bank of India, was established as Bank of Mysore Ltd by the erstwhile Maharaja of Mysore in 1913.
At the end of March, Karnataka had 7,885 branches of various banks, 3,057 in rural areas and 1668 in semi-urban areas. The urban centres had a branch network of 1,640 and metro had 1511 branches at the end of March.

Keeping the potential of the State and branch network in mind, bankers are looking at agricultural credit, MSME (micro, small and medium enterprises) sector and financial inclusion as the focus areas for growth during 2012-13.

K.P. Muralidharan, General Manager of Syndicate Bank and Convenor of State-level Bankers' Committee (SLBC) in Karnataka, told *Business Line* that the aggregate annual credit plan for Karnataka for 2012-13 comes to around Rs 48,612 crore. Though the projections were pegged at Rs 52,168 crore in the focus paper, the SLBC was advised by the National Bank for Agriculture and Rural Development to consider Rs 48,612 crore.

**Agri-financing**

To achieve this, the Karnataka SLBC is focusing on agriculture finance. However, he said that this year’s drought has created a peculiar situation with regard to disbursement of production finance. Of the 176 taluks in the State, 142 taluks have been declared drought-affected.

Based on the RBI directives, guidelines have been issued on restructuring of loans. Since it is difficult to go in for short-term loans in such a situation, SLBC is focusing on long-term investment finance for growth. Banks will focus on areas such as irrigation sector, land development, horticulture and floriculture in this regard, he said.

**MSME**

Muralidharon said banks have been asked to concentrate on this priority area.

At the end of March, the outstanding level of advances under MSME sector was Rs 51,605 crore, an increase of Rs 10,714 crore over March 2011.

Of this, nearly 63 per cent of the outstanding was in micro and small enterprises (MSEs) sector. Banks in the State had an outstanding of Rs 32,378 crore in 7.14 lakh MSE accounts. In fact, they (banks) disbursed Rs 11,930 crore to MSEs during 2011-12 against the annual target of Rs
3624 crore. The share of medium enterprises in the total MSME outstanding was Rs 19,226.5 crore in 9,235 accounts. Banks will promote MSME credit this fiscal also, he said.

Referring to the recent statement by of the Union Finance Minister to promote on education loans, Muralidharan said steps have been in the direction taken to provide educational loans to the needy.

During 2011-12, banks in the State disbursed Rs 624 crore to 45,835 students.

PROGRESS IN 2011-12

The banks in the State disbursed Rs 55,231 crore under priority sector during 2011-12 against the target of Rs 46,027 crore, recording 120 per cent growth.

An amount of Rs 28,680 crore was disbursed under agriculture against the revised target of Rs 31,380 crore. Out of total agriculture credit, disbursal of crop production loans was Rs 19,135 crore.

The achievement under secondary sector was Rs 11,930 crore against the annual target of Rs 3,624 crore. Under tertiary sector, the disbursements were at Rs 14,621 crore against the target of Rs 11023 crore.

Considering the current economic conditions, it is to be seen how the initiatives of various banks bear fruit during the current financial year.

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Hopes of better rabi sowing pound chana

Sluggish demand in pulses and gram flour and rise in selling pressure have dragged chana prices in Indore mandis in the past one week by about Rs 200 a quintal.

Though local mandis remained closed on Tuesday on account of Gandhi Jayanthi, in private trading chana (kanta) ruled at Rs 4,300-4,350, while chana (desi) ruled at Rs 4,150 a quintal.

Hopes of bumper sowing of chana in the coming season on account of adequate rainfall in the State and availability of imported chana reigned in chana prices in the physical market.

Last week chana (kanta) had ruled at Rs 4,500-4,525 a quintal, while chana (desi) ruled at Rs 4,350 with rise in buying support at the lower rate.

However, since then downtrend continues in chana on weak buying support and sluggish demand in pulses and gram flour.

Range-bound movement

Traders expect chana prices to remain range-bound with its prices fluctuating between Rs 100 and Rs 200, depending upon its availability and demand. But then the speculators would also be looking for an opportunity to push up its prices during the festive season with expected rise in its demand.
Chana dal has also declined by about Rs 200 a quintal in the past one week on weak demand in pulses.

Chana dal (average) in local mandis is ruling at Rs 5,200-25, chana dal (medium) at Rs 5,300-25, while chana dal (bold) is ruling at Rs 5,675-5,700 a quintal, which is almost Rs 200-300 a quintal down from last week.

Dollar chana ruled stable at Rs 6,500-7,600 a quintal even as its arrival remained negligible on account of closure of mandis.

In the past one week, dollar chana prices remained stable even as demand continued to remain weak both in the domestic and export market.

In the container also, dollar chana is ruling stable with 42/44 count being quoted at Rs 8,700; 44/46 count at Rs 8,600; 46/48 count at Rs 8,400; while 58/60 count ruled at Rs 6,400 a quintal.

**Green group sows seeds in social media**

Shankar Bhat Vadya, a farmer from Puttur taluk in Karnataka’s Dakshina Kannada district, has begun to grow organic crops now. Not only that, he has begun to implement traditional practices from the knowledge he has acquired from… Guess where?

Facebook. Many farmers such as Vadya are now taking advantage of social media sites like Facebook to improvise farming and improve their incomes. In particular, a Facebook group
“Hasiru” (which means ‘green’ in Kannada) is attracting the interest of farmers and has over 1,000 members now.

Started by Ramesh Kaintaje, a farmer from Bantwal taluk of Dakshina Kannada district, on April 28, ‘Hasiru’ had only 50-75 members initially.

“I live in a rural area and have a farm. I was basically interested in knowing more about Nature and its diversity. Then I thought, why not start a group to learn more about the green aspects of Nature,” said Kaintaje.

‘Hasiru’ now has members from across the country. The group members have come across over 1,000 plants through their interactions. “The information may be about a fruit, vegetable or any other interesting aspect of Nature. We are seeing 50-100 posts, on an average, every day the last two months,” said the group founder.

Now, Kaintaje and a few like-minded associates have been visiting progressive farmers frequently. They share information on the crops and best practices gained from such visits with group members. “We have met more than 20 farmers in the last two months,” he said.

“I think we already have a collection of 5,000 or more nature pictures, many of which have been taken by the members,” he said.

Narayana Upadhyaya, a post-graduate in horticulture and working in Bangalore, says the group has been documenting the biodiversity in Dakshina Kannada. It has brought to light some little-known crops, vegetables and fruits, through its efforts.

Dinesh Maneer, an engineer whose hobby is photography, says he has come to know of many new nature-related matters — ranging from fruits and insects to farmers and agricultural practices — through the group.

Kaintaje, who moderates this group, does not have broadband Internet connectivity. He attributes the success of achieving 1,000 members to the friends who are trying to expand the group.

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Demand peters out for groundnut oil

With demand almost nil, groundnut oil continued to decline on Tuesday.

A similar trend was seen in cottonseed oil, too.

According to millers, availability of groundnut for crushing is increasing as the new crop has begun to arrive in the market.

**Expecting further drop**

A Rajkot-based retailer said, “Despite a fall in price, demand for groundnut oil is low. Buyers are waiting for more downward revisions in the price. We are expecting demand after mid-October for Diwali festival.”

According to millers, as peanuts demand is almost nil, all the stock comes for crushing thereby pressurising the groundnut oil price since last three weeks.

Moreover, new groundnut crop arrival is increasing which also weighs on the price.

About 7,000-8,000 bags of groundnut arrives everyday in Saurashtra region.

Groundnut oil new tin decreased Rs 10 to Rs 1,775-1,780 for 15 kg.

Groundnut oil loose remained steady on Rs 945-950 for 10 kg and *telia* tin stood at Rs 1,460-1,461 for 15 kg.
Cottonseed oil

Cottonseed oil new tin for 15-kg was moved down by Rs 10 to Rs 1,070-1,080 and cottonseed oil wash was traded on Rs 600-603 for 10 kg.

About 200-250 tonnes of cotton oil was traded in Saurashtra.

According to a Gondal-based miller, prices may decline more this week.

Hike in bidding rates hits cardamom trade

Increasing of minimum bidding rates for cardamom at auctions has brought cardamom trade to a grinding halt as all traders opposed to the newly-introduced higher rates abstained from auctions held in the last one week.

The Spices Board raised the bidding rates from Rs 0.50 to Rs 5 from September 25.

The Empowered Committee constituted by the Board to study the problems of the cardamom sector had recommended that the minimum bidding rate should be increased to Re 1.

Some of the traders and auctioneers alleged that they were not given an opportunity to express their views on the issue. The plantations' representatives in the committee, they alleged, were mostly politicians and no experts were among those who attended a meeting in this connection with Kerala Chief Minister Oommen Chandy, had even suggested to raise the rate to Rs 10. Among its 18 recommendations of the Empowered Committee, one was to bring down the auction payment period to 12 days instead of 21. It was also accepted by the Board and all stakeholders.
Views on bidding rate

While some of the growers claimed that raising the minimum bidding rates would help increase the prices at auctions, a good number of growers argued that it was in no way going to help the growers as "bidding rate is not a problem. Even at the minimum rate of Re 0.50 the cardamom prices shot up to Rs 2,000 a kg a couple of years ago," they said.

A Bodi-based trader said that the minimum bidding rate at tea auctions is Re 1, while for several other major commodities including gold, it was only Rs 0.50.

A majority of the planters plan to send representations to the Spices Board requesting it to reduce the bidding rate to Re 1 as recommended by the Committee. "Even if it is brought down to Rs 2 we would be able to convince the traders to accept it. But there is no logic in raising it to Rs 5," growers said.

No sieving, grading

They said transactions worth Rs 35 crore have been lost and that in turn has cost the State of its revenue to the tune of around Rs 1 crore, they said. Apart from this, hundreds of workers in the trading hub Bodinayakanur have lost their wages for over a week now as no sieving and grading activities are taking place. No trading activities are reported from the open market also. It is the peak harvesting time and hence the capsules harvested will be piling up. Inordinate delay in resumption of auction would lead to deterioration of the quality of the material, such as fading of the colour, they said. On the other hand, when trading resumes the markets would be flooded with cardamom which in turn would push prices down, an auctioneer pointed out.

Tepid demand drags wheat

The bearish trend in wheat market continued with dara wheat prices drifting lower by Rs 80 a quintal on Tuesday.

Satish Kumar, a wheat trader, told Business Line that slack overseas enquiries coupled with domestic demand pulled wheat prices down.

The overall market sentiment for wheat are weak and additional supplies from Government warehouses could pull local prices further down, he said.
In the physical market, dara went down by Rs 80 and quoted at Rs 1,430-1,440 a quintal. Around 60 tonnes of dara variety arrived from Uttar Pradesh. The stocks were directly offloaded at the mills.

Mill delivery was Rs 1,430-1,435 while delivery at the chakki was Rs 1,440 a quintal. Being a national holiday, there was no trading on the NCDEX and the MCX on Tuesday.

Flour prices went down by Rs 60 and sold at Rs 1,440 for a 90-kg bag while Chokar ruled flat at Rs 690 for a 49-kg bag.

Afghanistan remains top destination for egg exports

Namakkal accounts for nearly 95% of the egg exports. Oman accounts for 33% of the total egg exported.

Rising production costs, dipping demand on seasonal uncertainties and slowing economy have put poultry processors in a tight spot. That could signal tough times for the industry.

Prices of poultry products are expected to rule lower in the coming days for two reasons: One is on account of austere month in the country and the second is the closure of schools that has led to piling up of eggs. Noon meal centres in the schools consume around 70 lakh eggs a day.
Exports gain

Though confronted with these issues on the home turf, the Rs 40,000-crore industry has hit a purple patch on the export front. The industry has got a boost with Oman lifting its ban on Indian poultry shipments.

The ban was imposed in the last week of March following reports of bird flu in the northern States.

The ban is lifted three months after the OIE (World Organisation for Animal Health) declares a country free from bird flu.

Namakkal accounts for nearly 95 per cent of the egg exports and Oman accounts for 33 per cent of the total egg exported.

“We send 2-3 containers (of 4.72 lakh eggs each) a day to Oman. And we expect poultry products to be back on the menu of other Arab countries also soon."

“We are currently shipping eggs to Afghanistan, Kazakhstan and Algeria,” said P. Selvaraj, Zonal Chairman, National Egg Coordination Committee (NECC), the apex body for the trade.

“Although, the quantity is negligible and in Algeria, we are facing severe competition from Brazil with their large-sized, low-priced eggs, we are hopeful of gaining a foothold in these markets."

“We expect exports to rise slowly and steadily. Afghanistan remains our top destination as of now,” he added.

Feed issues

With soyameal feed scarcer and costlier than ever, poultry units increasingly are looking for cheaper alternatives - and they found a good deal on cottonseed de-oiled cake, rapemeal, sesamum cake. Guarmeal is being used as a binding agent in feed formulation as it is free from salmonella, E. coli and aflatoxin. Feed is generally the largest single production expense for poultry operators.

Health
But the switchover has its own problems. First is the cut in output - conventional feed ingredients yielded 580-600 eggs for every 75 kg of feed against the 500-540 eggs got using the alternate ingredients.

Second is the health issue.

A Bangalore-based veterinarian said: “There is a dire need for such substitutes considering the escalating feed costs. But operators must be careful to follow detailed nutritional analyses for their animals to make sure they are getting a healthy mix of nutrients, amino acids in particular.

“The new formula is likely to affect the health of chicken by creating problems in the digestive system that will reflect on their egg laying. Farmers should test quality of new feed as poor quality feed will affect egg production and the birds in the long run,” he cautioned.

**Soya, chana outperform bullion in trade values**

![Soya and chana](image)

**THE BIG PICTURE**

(Trade value in Rs lakh crore)

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<thead>
<tr>
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<th>April-Sept 15</th>
<th>Growth</th>
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<tr>
<td></td>
<td>2012-13</td>
<td>2011-12</td>
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<td>Agri Commodities</td>
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<td>Bullion</td>
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<td>Metals (excluding bullion)</td>
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<tr>
<td>Energy</td>
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Agricultural commodities such as soyabean and chana registered a higher growth rate in trade values than bullion on the commodity exchanges in the first half of the current fiscal.

The total trade value of agricultural commodities increased 31 per cent on exchanges till September 15 over corresponding period a year ago. During the same period, the exchange
traded value of bullion and precious metals such as gold, silver and platinum decreased 26.33 per cent, according to data from the Forward Market Commission (FMC).

Prices of agricultural commodities led by soyabean and chana have been surging since April this year. Though gold and silver have also increased, the rise has been slower than soya and chana.

Chana futures rose 26.5 per cent between April 2 and September 15, while soyabean prices were up 20.6 per cent for the period. Gold and silver futures increased only by 14 and 11.6 per cent, respectively.

Industry analysts see a strong possibility of funds for equity that had flowed into the bullion could have reversed their direction to the equity markets. Such a trend could have affected the bullion volumes.

“Volatility in agri-commodity prices has led to the rise in volumes and traded value. The trend is unlikely to continue as prices of agri-commodity have softened in the past one month, while gold and silver has moved up,” said Ashok Mittal, CEO of Emkay Commtrade.

**Volumes**

According to the data available till August, bullion volumes have shrunk by 36 per cent while that of agri-commodities have seen a 10 per cent jump. Gold volumes shrunk 17 per cent in April-August period, while silver was down 36 per cent. Soyabean volumes doubled to 318.57 lakh tonnes during the period, while soyabean oil was up 53.4 per cent. However, the traded volumes in chana were down 44 per cent at 194.81 lakh tonnes from 348.17 lakh tonnes in corresponding period.

Sources in the MCX attributed the decline in gold and silver volumes to a largely stable trend in bullion prices.

The other agri-commodities that registered a rise in volumes and prices include rapeseed/mustard, castorseed, cottonseed cake, turmeric, wheat, coffee, barley and crude palm oil.
The sustained rally in agri-commodities in the past six months was largely in line with the global trend, though the prices have weakened off-late on harvest pressures.

**Spices Board urges Kerala to cut VAT on cardamom**

The Spices Board has suggested to the State Government that reduction of VAT on cardamom from 5 to 2 per cent will make the commodity more competitive in the market.

In a letter to the Kerala Agriculture Production Commissioner, the Spices Board Chairman, A. Jayathilak, pointed out that VAT on cardamom in neighbouring States such as Tamil Nadu is 2 per cent, while in Kerala it is five.

Purchase of small cardamom by a dealer registered in Kerala is treated as local purchase and 5 per cent VAT is levied. In neighbouring States, it is treated as inter-State purchase and charged only 2 per cent CST.

A unification of rates will facilitate entry of more dealers from Kerala into cardamom trade and encourage forward integration, Jayathilak said.

The marginal revenue loss in terms of reduced taxes will be more than compensated by the increased volume of trade, he said.

The cumulative effect will be more recovery in prices to the growers due to increased demand arising out of more bidders in e-auction. Spices Board, he said, is committed to issuing more small cardamom dealer licences to increase bidding participation in e-auction.

He pointed out that the small cardamom industry is dominated by inter-State buyers. Despite concerted efforts by Spices Board to issue more dealer licenses, around 80 percent of the dealers who participate in the e-auction are from Bodinaykanur, Thevaram and Cumbum in Tamil Nadu, he said.

It is also observed that as inter-State purchases come under CST, they enjoy the advantage of transferring the goods to any part of the country as ‘stock transfer to own godown’ at zero per cent additional tax whereas the local dealers have to pay an additional 2 per cent tax for inter-State transaction. This again gives the inter-State dealer a clear edge over dealers from Kerala, Jayathilak added.
Global coffee exports rise to 9.18 mn bags in August

Global coffee exports rose by 17 per cent to 9.18 million bags in August 2012, International Coffee Organisation (ICO) said.

The worldwide shipments stood at 7.83 million bags of 60 kg each in August last year.

In the first 11 months of the current coffee year, exports rose by 2.7 per cent to 99.58 million bags as compared to 96.97 million bags in October-August of the 2010-11 coffee year (October-September).

Higher quantity of shipments in July and August have boosted exports of the brew in the current coffee year.

Global coffee exports were up 18 per cent to 9.11 million bags in July 2012 from 7.73 million in July 2011.

Coffee exports in the first three quarters of the 2011-12 coffee year were down marginally to 81.16 million bags from 81.41 million bags in the same period in the last coffee year.

According to ICO, exports in the first half of current coffee year fell by 2.3 per cent to 51.7 million bags from 52.9 million bags in the October-March period of the 2010-11 coffee year, mainly on account of drop in shipments by Brazil and Columbia.

Small tea growers seek repeal of 2 Tea Act sections

The Confederation of Indian Small Tea Growers’ Associations (CISTA) has urged Union Commerce Minister Anand Sharma to initiate steps for the early repeal of Sections 12 and 14 of the Tea Act 1953 to benefit small tea growers, according to a CISTA release.

Sections 12 and 14 of the Tea Act require that all growers, big and small, must obtain planting permission and registration from the Tea Board after furnishing the necessary documents in support of ownership of the land being used for growing tea and soil testing reports.
Unfortunately, more than 80 per cent of small growers do not have clear land titles. As a result, they are unable to obtain Tea Board registration and are, therefore, not eligible for many of the benefits available under the Board’s welfare schemes.

“These provisions were incorporated when the minimum size of a tea garden was above 10.12 hectares,” says a CISTA memorandum to the Commerce Minister drawing his attention to the much smaller average land holding of small growers and that too without clear land titles. These provisions, therefore, were not relevant any more, the memorandum observes.

Referring to the Union Government’s decision to launch a pilot project in Assam for issuing biometric identity cards to facilitate the identification of small growers in the State and to complete the job by March 2013, CISTA has urged the Union Minister to introduce similar projects in other States also to cover all small growers in the country. The card should ultimately be treated as proof registration with Tea Board.

There are about two lakh small tea growers in the country and together they account for 28 per cent of the total tea growing area and 26.25 per cent of total tea production.

**N. Indian tea prices to jump on lower crop outlook**

The North Indian tea prices are set for a jump, according to producing companies.

This, it is felt, will happen due to the crop loss caused by heavy rains in large parts of Assam in September. Many tea growing areas, particularly in Upper Assam, are virtually submerged. Upper Assam accounts for an estimated 60 per cent of total tea production in the State which
again accounts for more than 50 per cent of the country’s total tea production and around 70 per cent of the total North Indian production.

C.S. Bedi, Chairman, Indian Tea Association, when contacted, could not estimate the probable rise in prices. “It is difficult to say anything firmly at this stage,” Bedi told Business Line. “The impact of the supply crunch will be felt in coming months. It is not happening right now. In fact, the tea prices in last two auctions, though higher than last year, showed a decline.”

However, in Upper Assam, as he estimated, the crop loss for September as a whole would be around 20 per cent. If only second half of the month was taken into account, the loss would be much higher, around 30 per cent, he said. In September 2011, Assam Valley (excluding Barak Valley, i.e. Cachar region) produced 93 million kgs. This figure this year will be down by about 18 to 20 million kgs, it was felt.

As it is, the country’s total tea production so far this year has been at a low ebb. Till July, the cumulative shortfall, according to the Tea Board, was 20 million kgs, though industry would put the figure higher at around 30 mkgs.

In North India, the production was hit first, by scanty rainfall which, coupled with usual limited availability of tea at the beginning of the season, pushed up prices by Rs 30 to 35 per kg over the previous year and now by excessive rain. In September alone, the South Indian crop was down three million kgs again due to insufficient rain.

“In North India, the weather has been playing truant since October last year”, observe tea industry sources pointing out that the situation improved a bit in June only to take a turn for the worse in July. Right now the price is up on an average by about Rs 25 per kg over the same period the previous year.

The best tea producing months in North India, July to October, have taken a hit and henceforth, the production will gradually taper off with the season coming to a close from January. Therefore, there is no way the crop being lost during these months can be recovered in next couple of months, add the sources.
No cheer

Interestingly, the projected rise in price brings no cheer to the growers. This is because the rise in cost has been a concern. “The probable gain from projected price rise will be offset by the increase in costs,” the ITA Chairman said.

He pointed out that the cost of coal has gone up three times as much in past few years, the price of fertiliser (Murate of Potash) from Rs 6,500 to Rs 15,000 a tonne in addition to the recent diesel price hike adding to the transportation cost and wage increases.

“In a high cost situation we stand to gain from price rise only if the volume is large which unfortunately is not the case now,” he observed.

Tapioca starch imports hit Kerala cassava cultivation

Cassava cultivation in Kerala has been hit due to price volatility and import of cassava starch from Vietnam and Thailand.

According to latest estimates, the area under the crop has dropped by 35 per cent in the last 10 years. However, an increase in productivity by 53 per cent has capped the decline in production to 6.05 per cent.

Meanwhile, the slashing of import duty of cassava starch from 70 per cent to 65 per cent in March is believed to have stimulated large scale import of tapioca starch from Thailand, Vietnam, etc.

This was instrumental in pulling down prices in 2011-12 season. The current import duty of 63 per cent from March this year has also fuelled a sentiment that the surge in imports would continue, a study carried out by Agricultural Market Intelligence Centre (AMIC) of the Kerala Agricultural University said.
K. Satheesh Babu, Principal Investigator of the study, said that the slow growth in the price coupled with instability was a major discouraging factor for tapioca cultivation in Kerala.

The growth in monthly State average farm price of tapioca was just 0.60 per cent between January 1999 and June 2011. Prices were subjected to a fluctuation of nearly 37 per cent during the same period.

He said that tapioca markets in Kerala are localised and decentralised due to its highly perishable nature. Prices are currently ruling in the range of Rs 6-8 a kg and Rs 12-15 a kg in wholesale and retail markets, respectively in various districts.

Based on the market sentiments and econometric analysis of wholesale tapioca prices, the AMIC is of the view that tapioca prices are likely to firm up in the short term on account of supply uncertainties.

A price range of Rs 8.60-9.75 is likely in the next three months, he said adding that quite a large section of tapioca farmers switched over to ‘nendran banana’.

Besides, truant monsoon during the main planting season of April and May and erratic rain in June coupled with price crisis have affected the planting.

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Meghalaya set to capture organic tea market

Enjoying the natural advantage of abundant rainfall and fertile soil, Meghalaya is not only slowly catching up with Assam and Darjeeling in tea output, but has also started production of high quality organic tea.

Though tea planters had identified the favourable conditions in the region almost two centuries ago, tea cultivation was never taken up seriously by successive administrations.
A prospecting party sent by the British East India Company to the region in the first half of the 19th century had called for vigorous tea cultivation, but sadly the advice was not acted upon.

A visit to Meghalaya by the Tea Board of India in 1974 changed the situation.

During the visit, the Tea Board delegation reported that the potential for tea cultivation was “immense” and suggested transplantation of tea varieties from Assam and Darjeeling in the State.

Accordingly, the varieties brought from the two areas were transplanted in experimental gardens at Umsning in Ri-Bhoi district, Tebronggre in West Garo Hills district and at Riangdo in West Khasi Hills district.

The quality and yield of tea in these experimental gardens prompted the State Government to incentivise commercial cultivation of tea in private farmers’ farmlands, tea experts in the State said.

Now Meghalaya tea has earned a name for itself in the national and international markets for possessing superior quality, rich fragrance and good liquor.

State Horticulture officer M. Lyngdoh said the Government had prioritised production of organic tea in an effort to aggressively penetrate that segment in markets, national and international.

**A ‘low allergy’ milk from genetically modified cow**

Scientists have engineered a genetically modified cow that produces milk that is less likely to cause allergic reactions.

The modified cow produced milk lacks beta-lactoglobulin - a major whey protein of cow and sheep’s milk, to which some people are allergic.

The study has been dubbed as a “milestone” by scientists.

However, some campaign groups say it raises ethical concerns, the ‘BBC News’ reported.
There are important differences between a woman’s breast milk and cows’ milk, such as beta-lactoglobulin, which is found in milk from cows but not people.

“It is not surprising that it constitutes a major milk allergen,” researchers from the University Waikato in New Zealand said.

The instructions for making the beta-lactoglobulin protein are contained in genes in the cow’s DNA.

The scientists’ added extra genetic material to disrupt the manufacturing process using a technique called RNA interference.

The resulting calf was born without a tail; however, the researchers say that is “unlikely” to be because of the genetic modification.

It has not yet become pregnant and produced milk normally so the scientists used hormones to jump—start milk production.

“All milk samples from the transgenic calf were devoid of any detectable beta-lactoglobulin,” they said.

The researchers concluded that the technique was an “efficient tool” for modifying livestock.
Disease, weather, give ryots a hard time in Canacona

CANACONA: If the weather wasn't playing truant enough with the crops in Canacona taluka, paddy cultivators in three villages are crying foul over the attack of what they're terming a "mysterious disease".

But zonal agricultural officer Shivram Gaonkar pooh-poohed any mystery, calling the 'paddy blast' a common disease that attacks crops particularly in the initial stages of re-plantation.

"To protect against the disease farmers should undergo the (agriculture department's) seed treatment course before planting," said Gaonkar.

He pointed out that seed demonstration programmes have been held across the taluka since the last year-and-a-half to acquaint farmers with crop diseases.

The demonstration programmes have led to nearly 850 ha of land coming under cultivation this season, Gaonkar said.

Following complaints from farmers in Khola (Gaondongorem and Poinguinnim are the other two affected villages) the ZAO's office had advised them to use systemic fungicide and tricyclazole. The farmers subsequently noted a 25-30% improvement in crop, Gaonkar said.

He added that apart from the disease, the dry spell through much of September had affected much of the paddy crop, in its ear-head (grain formation) stage, growing on the taluka's uplands (Morod). The showers towards the end of last month have offered some relief, farmers said.

There were fears earlier that the famous Khola chilli and cucumber would be among the many local produce that would be affected by the dry spell.
Gaonkar said the vegetables had been showing signs of waning, forcing the rotting fruit to fall off the plant.

Several areca nut farmers from Poinguinnim and Loliem claimed they had suffered losses due to large-scale premature dropping of fruits. Farmer Govind Prabhugaonkar from Mahalwada-Poinginium, who has around a hectare of land under areca nut cultivation, claimed a fungus was causing the fruits to drop prematurely. He claimed he has suffered 60-65% losses and demanded government compensation.

But Poinguinnim sarpanch Mahesh Naik quickly pointed out that farmers in Cotigao and Poinguinnim, a year later, are still to receive compensation for damage to crops by wild animals.

Fertilizer crisis looms over kharif crops

KOLKATA: In a development bound to have manifold repercussions, some of it political, a group representing the estimated 40,000 fertilizer distributors, dealers and retailers in Bengal went on an indefinite strike starting Monday. They have refused to acquire and disburse fresh fertilizer stocks till the state government meets their demands.

However, its immediate impact can't be gauged in the critical kharif season for most of the crops have already been sown. But if not resolved soon, its fallouts could be enormous in a state where skyrocketing fertilizer prices have already affected the agricultural output.

The Pashchimbanga Krishi Upokaran Babsayee Samiti claims they were forced to take this decision after successive pleas of intervention fell on deaf ears. The state agriculture department had tried to bring all stockholders on board through the Fertilizer Association of India, but the stalemate couldn't be solved.

The samiti has put forth a three-fold demand and wants the government to initiate talks with fertilizer companies and ask them not to cross sell non-fertilizer products like seeds and pesticides along with fertilizers.

They also want the state to ensure that the freight costs are catered to by the fertilizer companies, thereby relieving distributors and dealers from the overhead costs. They claimed
the government has left them in a lurch after it decided to act against retailers and dealers for trying to push sell non-fertilizer products to the end users (read the farmers).

"The government has little to do as prices are mainly a fallout of the Centre's policies and fertiliser companies," a finance department official said. The distributors' claim where any trade gives a profit operating margin of 10-12%, they've been already working at 1.5% to 2% and if the state doesn't take up their demands, the trade will be unviable.

A cow that gives 'low allergy' milk

LONDON: Scientists have engineered a genetically modified cow that produces milk that is less likely to cause allergic reactions.

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**Now, genetically modified cow that provides 'low allergy' milk**

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**Farmers to lay siege to KRS dam today**

BANGALORE: On Gandhi Jayanti day, the farmers of the Cauvery basin resolved to launch a 'non-cooperation movement' protesting against the release of water to Tamil Nadu.

The agitators, who continued to block the Bangalore-Mysore highway and hold protest marches across the basin areas, have decided to lay siege to KRS dam in Mandya district on Wednesday. After a meeting, Cauvery Hitharakshana Samiti chief and former MP G Made Gowda announced that the people of the region would defy the government by refusing to pay taxes.

The Samiti has called upon the people to send at least one member from their family for the 'KRS Chalo' agitation on Wednesday. The farmers of Mandya are also angry with the people of Bangalore. Upset with the poor response from Bangaloreans over the release of water, hundreds of people stormed the TK Halli pumping station (from where water is supplied to Bangalore city) and forced the officials to stop the pumps.

Gowda said, "We staged a symbolic protest near the water station on Tuesday demanding that water pumping be stopped. We want Bangaloreans who get Cauvery water to join us in the protest to put pressure on the government against release of water. We will lay siege to KRS dam on Wednesday after converging at Belagola."

**Pontiffs put pressure**

Pontiffs Sri Balagangadharanatha Swamy of Adi Chunchanagiri Mutt and Sri Shivarathrishwara Deshikendra Swamy of Suttur Mutt held a meeting with the politicians, farmers' leaders and
activists and urged the state government to stop the release of water immediately. The MLAS from the region, Mandya MP N Cheluvarayawamy, actor and former Union minister M H Ambareesh and Karnataka Rakshana Vedike president T A Narayana Gowda, were among those who were present at the meeting. The meeting resolved to intensify the stir in all the districts of the basin.

G Made Gowda said that a delegation led by him would meet Prime Minister Manmohan Singh and request him to review his order. Forest minister C P Yogeshwar, who was also present in the meeting, said that it would not be possible to stop the release of water, as it is a SC directive.

**Cloud-seeding sop**

The state government, which has planned to file a review petition before the Supreme Court on Wednesday, tried to defuse the escalating tension, but in vain. To appease the farmers, the government announced that it would implement cloud-seeding in the Cauvery basin for water. "We have earmarked Rs 5 crore to harvest clouds. The tenders will be called shortly," water resources minister Basavaraj Bommai said.

The minister along with chief secretary S V Ranganath held discussions with former PM H D Deve Gowda and sought advice to handle the crisis, both on the ground and in the apex court. He also met Sri Balagangadharanatha Swamy and Sri Shivarathrishwara Deshikendra Swamy to seek their support.

**Bus services halted**

On Wednesday too inter-state connectivity took a beating. Buses came to a grinding halt between 7am and 3pm on the Bangalore-Mysore highway following road blocks at various points between Maddur and Mandya. Both KSRTC and private buses were off roads in Mandya. Activists on Tuesday outwitted security agencies and paramilitary forces by entering Kabini dam on coracles to protest against the release of Cauvery water.
**Will move Supreme Court: Chief minister**

Karnataka will appeal to the Supreme Court seeking review of the Cauvery order, chief minister Jagadish Shettar said on Tuesday. He said the government had no choice but to abide by the apex court's order. "We had approached the Cauvery River Authority, chaired by the Prime Minister, seeking justice over the issue. We had to abide by the SC order and accordingly we have released water till today. We are hopeful of resolving the issue," he said. TNN

**Seers ask Bangaloreans to join protest**

At a meeting held by pontiffs Sri Shivarathrishwara Deshkendra Swamy of Suttur Mutt and Sri Balagangadharanath Swamy of Adi Chunchanagiri Mutt with politicians, farmers' leaders and activists, the seers asked the people of Bangalore to participate in the agitation.

Other speakers expressed their anguish over the poor response of Bangaloreans to the movement. Some pro-Kannada organizations suggested that water supply to Bangalore be cut off. The seers assertion came even as scores of protesters laid siege to the TK Halli pumping station that supplies water to Bangalore city. The protesters were residents of Hadli and other villages. TNN

**Cauvery stir: Siege at Torekadana Halli hits water supply**

BANGALORE: The simmering anger among people of Mandya district over the release of Cauvery water took a nasty turn on Tuesday as scores of protesters laid siege to the Torekadana Halli station that pumps water to Bangalore city and got officials to stop all the pumps.

Though the pumps started working 30 minutes later, the impact of the shutdown is likely to disrupt water supply to northern, southern and central parts of Bangalore on Wednesday. The affected areas will be Hebbal, Yelahanka, Peenya, Vidyaranyapura, Malleswaram, High Grounds, Kumara Park, Chikka Lalbagh, MG Road, Shivajinagar, RR Nagar, Banashankari and Kanakapura Road areas.
BWSSB officials attributed the disruption to the 48-hour work cycle of the pumps and cascading effect of the shutdown. The pumps will gain full speed only after 48 hours.

The protesters attacked the TK Halli station, located in Mandya district, and forced the BWSSB officials manning it to switch off pumps for Cauvery stages 1, 2, 3 and 4 around 2.15 pm. Board officials said the pumps were shut down for about 30 minutes till 2.45 pm.

Drinking water supply to Bangalore was also disrupted at the Tataguni pumping station on Tuesday due to a power failure.

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Sharma: FDI in interest of farmers

Unfazed by the strong opposition to allow FDI in retail even from some allies, the government on Tuesday made it clear that the decision will not be rolled back as it is in the interest of the farmers and consumers.

Addressing a group of farmers at the AICC headquarters here, commerce and industry minister Anand Sharma said, “This decision is final. This decision will not be rolled back. We are not afraid of anything. This decision is taken in the interest of the farmers and consumers.”

Meanwhile, a strong plea was made by farmer leaders of Bharati Kisan Union, who met UPA chairperson Sonia Gandhi on Tuesday for providing financial relief to the agricultural sector in the form of loan waivers and other measures.

The farmer leaders also expressed support for the UPA government’s decision to allow FDI in multi-brand retail and also submitted a memorandum of other demands.

In the memorandum, the BKU leaders, led by national president Bhupinder Singh Mann and Punjab unit president Baldev Singh Mianpur, have sought a loan waiver stating that there was a huge debt burden on farmers.