

57 farm products enjoy GI status in India



Mattu Gulla, a brinjal variety has been given the GI tag. Photo: A.J. Vinayak

NEW DELHI, February 25, 2014 - Government has granted Geographical Indicator (GI) status to around 57 agricultural products such as Darjeeling tea, Pokkali rice and Dharwad Pedha in the last ten years.

India enacted the Geographical Indications of Goods (Registration & Protection) Act, 1999, which came into effect on September 15, 2003. The GI label certifies not only the geographical origin of a product but also confirms adherence to some production standards.

Major farm products that enjoy GI status include: Darjeeling Tea, Kangra Tea, Coorg Orange, Mysore Betel leaf, Nanjanagud Banana, Mysore Jasmine, Navara Rice, Palakkadan Matta Rice, Malabar Pepper, Allahabad Surkha, Monsooned Malabar Arabica and Robusta Coffee, Coorg Green Cardamom, Eathomozhy Tall Coconut, Dharwad Pedha, Pokkali Rice, Laxman Bhog Mango and Naga Mircha, among others.

Besides farm products, handicrafts and manufactured goods are also given the GI tag. Even foreign products from various countries have been accorded GI status under the Indian act. Some of the major foreign GIs include Peruvian Pisco, French Cognac and Champagne, American Napa Valley, Porto and Douro wines from Portugal, Mexican Tequila and Italian Parma, the official added.

Giving agriculture its due

There are obviously several dimensions to India's recent agricultural performance which Finance Minister P. Chidambaram in his budget speech termed as "stellar". A week before the budget, Agriculture Minister Sharad Pawar had announced that foodgrain production is on course to touch a new record of 263 million tonnes, up from 255.36 million tonnes last year. The good performance is seen with regard to other crops too. Estimates of production of sugarcane, pulses, cotton and oilseeds are also encouraging. A good agricultural season has contained farm prices, and moderating food prices are behind the steep fall in both retail and WPI inflation in January. Just as important, news of a bumper agricultural harvest has, to some extent, dampened inflation expectations. Arguably, the most noticeable feature has been the contribution of agriculture to overall GDP growth this year. The Central Statistical Organisation in its advance estimates has projected growth in agriculture and allied activities at 4.6 per cent during the current year, with overall GDP growing at only 4.9 per cent. Since industry and the usually dependable services sector have disappointed, the farm sector is seen to have almost single-handedly underpinned recent economic growth. Even over a longer period the track record has been good. Over the past ten years, agriculture has grown by around 4 per cent a year on an average, but it must be pointed out that during most of that period the monsoons were satisfactory.

It is obvious from recent experience that supportive government policies by themselves cannot keep agricultural production growing at a high rate during periods when the

monsoons fail or are below par. The question has therefore been asked whether during 2014-15, the monsoons will continue to be beneficial. With dependence on the monsoons still being high, for next year the contribution of agriculture to economic growth cannot be taken for granted. Ironically, the very success of agriculture has exposed the weakness of some government policies, which are tilted towards cereals, to the detriment of other essential food products. Specifically, the periodic hikes in minimum support prices and open-ended procurement have resulted in an imbalance, leading to a glut in the production of rice. Minimum support prices have in practice become procurement prices, and with State governments adding to it a bonus, the cost of procurement has become high. Besides, storage has been a serious problem. Government godowns are overflowing at a time when cereal inflation is still high. All this suggests that the government's major intervention in the farm sector through minimum support prices needs a closer look.

Regulating genetic modification

In the case of technologies with benefits and risks, it is important to have regulatory mechanisms which can help analyse them in an impartial manner



field trials: The investment in Bt cotton research was about Rs.100 crore but it might have resulted in a profit of over Rs.50,000 crore. — Photo: M. Srinath

It is 61 years since the beginning of new genetics based on the discovery of the double helix structure of the DNA molecule. It is also 31 years since the production of transgenic plants. The first patent for a living organism went to Dr. Anand Chakraborty who, through recombinant DNA technology, developed an organism to clean up oil spills. The fields of medicine, industry, environment and agriculture have reaped the benefits of the science of molecular genetics. In medicine, it has led to new vaccines, insulin and genetic medicine. The major concern in medical genetics is one of ethics, an example being the application of recombinant DNA technology for

reproductive cloning.

Therapeutic cloning, on the other hand, has been welcomed. Growing pollution of ground and river water has created great interest in bioremediation methodologies in the field of environmental biotechnology. It is only in food and agricultural biotechnology that there are concerns about biosafety, environmental safety, biodiversity loss and human and farm animal health.

In technologies which share benefits and risks, it is important to have regulatory mechanisms which can help to analyse risks and benefits in an impartial and professionally competent manner. It is the same in the case of nuclear energy. This is why the government introduced a Biotechnology Regulatory Authority Bill in Parliament.

Unfortunately, the validity of this Bill has now expired with the conclusion of the 15th Lok Sabha. This gives the Indian Council of Agricultural Research (ICAR), Department of Biotechnology (DBT), Indian Council of Medical Research (ICMR), Council of Scientific & Industrial Research (CSIR), the Ministry of Environment and Forests and other agencies a chance to revisit the text of the Bill and get a new Bill prepared for introduction as soon as

the new Parliament convenes. An academy may be set up to prepare a new text which is likely to have greater political, public, professional and media acceptance.

Addressing concerns

The Agricultural Biotechnology Committee — which I chaired in 2003 and which submitted its report early in 2004 — had recommended a Parliament approved regulatory agency as well as the necessary infrastructure for conducting all India coordinated trials with genetically modified organisms (GMO). The necessary precautions, such as the needed isolation as well as demonstration of the importance of refuge, should be undertaken under this project. As 10 years have passed since this recommendation was made, we should lose no further time in implementing it. There must be a trial and safety assessment system which answers the concerns of anti-GMO non-governmental organisations. The present moratorium on field trials with recombinant DNA material is a handicap as well as a disincentive in harnessing the benefits of the wide array of transgenic material available with various research organisations and universities. Many of the GMOs in the breeders' assembly line have excellent qualities for resistance to biotic and abiotic stresses as well as improved nutrition. Much of this work has been done in institutions committed to public good. Also, much of the work has been done by young scientists, discouraged now because of the lack of a clear official signal on the future of genetic modification.

As agriculture is a state subject, State agricultural universities and State departments of agriculture should be involved in the design and implementation of field trials. It takes nearly 10 years time for a new variety to be ready for recommendation to farmers.

Therefore, speed is of the essence in organising field trials and getting reliable data on risks and benefits.

Public-private partnership

The return from investments in biotechnology research is very high. Bt cotton research might have resulted in a profit of over Rs.50,000 crore, as compared to the total expenditure of about Rs.100 crore in such research. Public sector institutions should concentrate on the development of high yielding and disease resistant varieties, while obviously the private sector will only produce hybrids whose seeds will have to be brought every year by farmers. A joint strategy by public and private sectors will help to ensure the inclusiveness of access to improved technologies among all farmers.

Nutrition security involves paying attention to balanced diets (both macro and micronutrients), clean drinking water, sanitation, primary health care and nutrition literacy. While the Food Security Act 2013 will ensure that all needing social protection against hunger will be able to get the needed calories, other nutritional problems such as protein hunger and hidden hunger caused by the deficiency of micro-nutrients will need similar attention. Thus, while working for nutritional security, both food and non-food factors, particularly drinking water and sanitation, will require concurrent attention.

Biofortification also needs our attention. Naturally biofortified crops like yellow flesh sweet potato, drumstick, amla, breadfruit, etc should be popularised in nutrition gardens and agroforestry systems. Biofortified crops developed by selection and breeding like iron rich bajra should also become available. On my suggestion, the Finance Minister provided in the budget for 2013-14, Rs.200 crore for promoting nutri-farms in districts where there is a high malnutrition burden. We should launch a programme this year, as also the International Year of Family Farming, to develop every family farm into a nutri farm, so that agricultural remedies can be applied to the major nutritional maladies prevalent in the area.

Promoting research

There is need for a pan-India political support to promote genetic engineering research. Every research institution should have a project selection committee to examine whether recombinant DNA technology is necessary to achieve the desired breeding goal. In many cases, marker assisted selection would be adequate for developing a variety with the necessary characters. Recombinant DNA technology should be resorted to only when there is no other way of achieving the desired objective.

Translational research needs greater attention for converting scientific know-how into farmers' do-how. Culinary and organoleptic characteristics of new varieties should be examined with the help of home science colleges. There is increasing interest in organic

farming. Organic farming certification procedures permit the use of marker assisted selection.

Several States want to become organic farming states. ICAR should explain the prerequisites for successful organic farming, such as the availability of adequate organic manure and plant protection measures which do not need synthetic pesticides. There has to be a methodology to face the challenge of the unholy triple alliance of pests, pathogens and weeds on organic farms.

Biodiversity is the feedstock of the biotechnology industry. Therefore, the conservation and sustainable and equitable use of biodiversity should be a major concern of biotechnologists. Krishi Vigyan Kendras should have the capability of offering scientifically credible advice to farmers on GMOs. The academy should set up two committees — on the public understanding of science and the political understanding of science — on the pattern of such committees set up by the Royal Society of London.

Disseminating information

Media resource centres should be set up to give up-to-date scientific information to media representatives. Village knowledge centres should be utilised for spreading correct information on GMOs.

Countries like the United States have effective regulatory mechanisms supported by scientific infrastructure. In the U.S., three agencies — The Environmental Protection Agency (EPA), Food and Drug Administration (FDA) and Agricultural Plant Health Inspection Service (APHIS) — are concerned with regulations and work as a team while examining and clearing the safety aspects of GMOs. It is time that we also have a professionally managed and coordinated efficient regulatory mechanism.

The academy should facilitate the early removal of the moratorium on field trials by ensuring that such trials will be conducted under safe conditions. The academy could also develop a statement on new technologies for small farmers to be considered for inclusion in the election manifestos of political parties.

(Prof. M.S. Swaminathan is founder chairman and chief mentor, UNESCO Chair in Ecotechnology, M.S. Swaminathan Research Foundation, Chennai.)

Young scientists who have done a lot of work are getting discouraged because of the lack of a clear official signal on the future of genetic modification

There must be a trial and safety assessment system which answers the concerns of anti-GMO non-governmental organisations

Spotlight on agriculture

Budget of Kollam district panchayat presented



Kollam District panchayat vice president K. Jagadamma presenting the budget. — Photo: C. Suresh Kumar

Agriculture remains the focus of the 2014-2015 budget of the district panchayat that was presented here on Monday.

K. Jagadamma, vice president and Finance Standing Committee chairperson of the district panchayat, presented the budget that showed a revenue of Rs.108.9 crore, expenditure of Rs.99.20 crore, and a surplus of Rs.9.67 crore.

An allocation of Rs.3.30 crore has been made in the budget for setting up a seed godown and rice mill complex in Sooranad north panchayat. The godown is meant for procuring paddy from farmers and producing

value-added products.

The project, aimed at enabling farmers of the district get a better price for their paddy, will be implemented with fund support from NABARD.

The budget has set aside a share of Rs.70 lakh for promoting the Kollam Model Integrated Paddy Cultivation Programme. The aim of this programme is to bring 25,000 acres under paddy cultivation in the district. It will be implemented with the cooperation of 12 grama panchayats.

The budget also has provisions for training traditional farmers interested in producing vegetable seeds. These farmers will produce vegetables which will be procured by Government Agricultural Farm at Anchal where the seeds will be produced. Rs.30 lakh has been allocated for this scheme.

Constitution of farm sector labour banks and provision of training in the operation of mechanised farm equipments gets Rs.50 lakh in the budget. Another Rs.5 lakh goes for starting a tractor operation training school attached to the farm engineering office. Animal husbandry and dairy development sectors together get an allocation of Rs.5.13 crore from the budget. Out of this, Rs.4.5 crore will be for the development of the Kollam model integrated poultry scheme for production of eggs. For the purpose, a state-of-the-art hatchery will be set up at Ayur from where 5 lakh chickens will be hatched and distributed this year itself.

The industrial sector gets an allocation of Rs.2 crore that will be largely used for creating infrastructure for entrepreneurs. This will include creating new industrial estates and renovation of existing industrial estates. Rs.18 lakh has been allocated for establishing a honey collection centre at Yeroor.

Education has also got a handsome share of the budget. These include a “kutty doctor programme” with an allocation of Rs.5 lakh through which Plus One science students from selected schools will be provided awareness on various diseases and given training on primary health care.

Under the health sector, Rs.2.5 crore has been allocated for the development of the district hospital, Rs.40 lakh for the development of the Government Victoria Hospital for Women and Children, Rs.37 lakh for the development of the district Homeo hospital, and Rs.77 lakh for the development of the district Ayurveda hospital.

Under the welfare schemes for the scheduled communities, there are allocations for improving the living standards of the members of these communities. Rs.2 crore has been allocated for starting a boarding school exclusively for students from the scheduled communities where quality education and opportunities to develop sports talents will be provided.

District panchayat president S. Jayamohan presided over the meeting. Anil Kumar, secretary of the district panchayat, welcomed the gathering.

Advanced farm marketing centres in all taluks

High-tech soil testing lab opened in Kalpetta

KALPETTA, February 25, 2014 - Agriculture Minister K.P. Mohanan has said that the government will set up advanced agriculture marketing centres with modern facilities in all taluks in the State.

Speaking after opening a high-tech soil testing laboratory here on Monday, Mr. Mohanan said that the government had given prime importance to the farming sector in the State and would set up advanced procuring, processing and marketing centres with cold storage facilities in each taluk.

Sustainable agriculture production could be ensured only by improving the fertility of soil, the Minister said. Lack of scientific knowledge among the farmers on the application of chemical fertilizers had led to the degradation of soil fertility. Various factors, including micro nutrients, had a significant role in determining soil fertility and the presence of such

factors could be analysed only through high-tech soil laboratories, Mr. Mohanan said. The laboratory has been set up at a cost of Rs.1.3 crore.

📌 **Minister lays stress on improving soil fertility**

📌 **Laboratory set up at a cost of Rs.1.3 crore**

Farmers demand release of water

BELLARY, February 25, 2014 - Farmers from several villages in Bellary taluk and also from various villages in neighbouring Kurnool district of Andhra Pradesh on Monday laid siege to the office of the Executive Engineer of Tungabhadra Board's low-level canal, demanding release of the indented quota of water for their crops till March 31st.

The farmers, led by Darur Purushotam Gouda, president of Bellary district Karnataka Rajya Raitha Sangha Hasiru Sene and Ramu, representing farmers from Kurnool district, accused the officials of releasing water into the low-level canal less than the quantum indented for. As against the joint indent of Irrigation Consultative Committee (ICC) of both the States, of 1,650 cusecs only around 1,000 cusecs of water was flowing into the canal. Karnataka's quota was 525 cusecs and that of Andhra Pradesh was 690 while the rest was attributed to wastage and evaporation loss.

The farmers gheraoed the Executive Engineer and urged him to release the required quantum of water and threatened to continue their agitation if their demands were not met.

'Enhance release'

The Executive Engineer, after talking to the Chief Engineer, announced that the Chief Engineer would take stock of the water available in the reservoir and take a decision for enhanced release of water into the canal. The farmers decided to come out of the office announcing that they would lay siege again on Wednesday if their demand was not met. Later talking to presspersons, Mr. Ramu said that with the reduced quota, the farmers of Andhra Pradesh at the inter-State border were getting less than 300 cusecs. At this rate, standing crop in around 50 to 75,000 acres would be severely affected.

The low-level canal caters to the irrigation needs of Bellary and Kurnool and Cuddapa districts of Andhra Pradesh

📌 **Farmers say the reduction in water will affect crops**

📌 **Threaten to protest again if demand isn't met**

Alter crop pattern in Kerala: expert



Kadambote Siddique

Kerala should think of changing its cropping patterns and systems to combat the effects of climate change, Kadambote Siddique, Director, Institute of Agriculture, University of Western Australia, has said.

On a visit to Kerala Agricultural University, his alma mater, Dr. Siddique told *The Hindu* that crop simulation models indicated that the area under rice and wheat was likely to decline globally in the coming decades and food grain production was under threat from rise in temperature and rainfall uncertainties associated with

global warming.

“Agriculture had been seriously affected by the heat wave of 2003 in the European Union, drought of 2004 in southern African countries, drought in Australia and other wheat growing countries in 2006, and droughts in 2002 and 2009 in India,” he said.

Fast-changing climate

He observed that climate in Kerala was fast changing with rainfall during southwest monsoon declining and a rise in temperature being projected in relation to global warming. “It is predicted that a third of Kerala’s biodiversity would vanish or would be close to extinction by 2030. A decline in wetlands is causing floods, droughts, and groundwater depletion. Sand-mining should be checked. There is also an urgent need for an action plan for afforestation and protection of natural forests,” he said. He called for new agronomic practices and development of new varieties and breeds. “Despite several biotic and abiotic constraints, agricultural production in Australia increased on account of improved agronomic practices, new varieties, and diversification of farming systems. India too can do it,” he said.

He said that proper assessment and management of ecosystems was imperative. “Land use pattern should be re-assessed and revised to the extent possible to conserve our water bodies, paddy fields, and biological hotspots. We have to use existing bio physical models to predict ideal combinations of nature and development,” Dr. Siddique said.

Technology’s role

He said that modern technology could be used to combat the effects of climate change. “Use of modern systems such as Geographic Information System (GIS) and Global Positioning System (GPS) to assess environmental damage is as important as diagnosing diseases. We blissfully ignore environmental analyses as we are callous about the impact of environmental damage. We do not assess the climate sufficiently early. Making climate prediction at the regional level is important for making farming profitable,” he said.

An alumnus of KAU, Indian Agricultural Research Institute, New Delhi, and the University of Western Australia, Dr. Siddique has worked for more than two-and-a-half decades in the fields of crop physiology, production agronomy, germplasm enhancement, breeding, and industry development of pulse and cereal crops. He has contributed to the expansion of the pulse industries in Australia. He has developed and commercially released chickpea, lentil and lathyrus varieties that have superior yield and are disease-resistant.

Pest and disease forecast by TNAU for February

Sporadic incidents of leaf fodder, stemborer reported from some districts

COIMBATORE, February 25, 2014 - Tamil Nadu Agricultural University has predicted the pests and diseases that farmers can expect during this month and the measures that can be taken to either prevent them or keep them under control.

In Tirunelveli, Tiruchi, Kanyakumari, Pudukpttai, Thanjavur, Coimbatore, Ramanathapuram and Salem, sporadic incidence of leaf fodder and stemborer has been noticed.

Farmers are asked to monitor the activity of adult moths by installing light traps.

If needed, they can spray neem seed kernel extract (NSKE) 5 per cent or use any one of the following insecticides if population exceeds the Economic Threshold Level.

In Salem, Dharmapuri, Theni, Tirunelveli and Virudunagar districts, sucking pests such as aphids, leafhoppers, and thrips were noticed. Farmers are asked to monitor sucking pests using yellow sticky traps.

If needed, they should spray SNKE 5 per cent or Imidacloprid 200 SL at 40 ml an acre.

In Virudhachalam, Cuddalore, Erode and Salem, borer pest complex was noticed below ETL.

As dry weather in the coming months will be a cause for concern, farmers are advised to release egg parasitoid. Trichogramma use from fourth month at 15 days interval is recommended to manage the pest.

Leafminer incidence was noticed in Madurai, Salem, Dharmapuri, Pudukottai, Tiruchi, Tirunelveli, Coimbatore, Ramanathapuram, and Virudunagar districts. Farmers are asked to monitor leafminer adult, use light trap, and if needed spray NSKE 5 per cent.

Leathel leaf blight disease was noticed in Coimbatore, Erode, Dindigul, Thanjavur, Tirunelveli, Kanyakumari and other districts of Tamil Nadu.

Farmers are asked to take preventive measures. Remove and burn severely affected leaves to avoid further spread, spray 1 per cent bordeaux mixture for two times at 30 days interval or root feeding of carbendazim. Application of 200 gm pseudomonas fluorescence along with 50 kg of FYM and 5 kg of neem cake / palm a year is recommended.

Tapioca, papaya and mulberry farmers are asked to watch out for incidence of papaya mealy bug.

Farmers are asked to use only papaya mealybug parasitoids.

☒ ***Dry weather in the coming months can be a cause for worry***

☒ ***Farmers advised to install light traps for moths***

Botanists exhorted to catalogue flora

KADAPA, February 25, 2014 - There is no life without plants and plants teach mankind the way to survive against odds, A. S. Raghavender, professor of Plant Sciences, University of Hyderabad, said on Monday.

In his keynote address in the inaugural session of national conference on 'YVU Plant Biology 2014' organised by the Department of Botany, he said the physiological process and the product in plants were useful for mankind and has a sustenance factor for any civilisation. Prof. Raghavender later delivered a special lecture on photorespiration.

Renowned taxonomist and biodiversity specialist Professor Emeritus T. Pullaiah of Sri Krishna Devaraya University, said that the local flora needs to be catalogued on a priority basis and exhorted botanists of the region to actively do so. Consumption of natural plant resources like lime, nannari and coconut water consumption should be encouraged instead of sugar-based beverages in the health and economic point of view, he said. He also delivered a special invited lecture on taxonomy in the technical session later.

Vice-chancellor of Yogi Vemana University Bethanabatla Syamsundar, who was chief guest, congratulated the faculty members of Botany for organizing the seminar. Earlier, seminar convener and associate professor of Botany P. S. Sha Valli Khan briefed the theme of the seminar. Over 100 scientific papers were presented in the seminar .

Tobacco e-auction commences

ONGOLE, February 25, 2014 - e-auction of tobacco, principal commercial produce in Prakasam district, began smoothly on Monday under the watchful eye of Tobacco Board chairman K.Gopal in eight auction southern light soil platforms in the Ongole region, which accounts for half of the State's tobacco production.

Four players -- Indian Tobacco Company (ITC), Godfrey Phillips India (GPI), Alliance One International and Maruti Tobacco Products (P) Limited entered the market after a wrangle between growers and traders over the bidding process.

Mr Gopal, who brought about a rapprochement between traders and farmers over the bidding process after protracted negotiations last week, said a committee would be constituted, if necessary, to look into problems after observing the operation of the bidding process for a month.

"It is a good takeoff. More players are expected to enter the market after the auction in Karnataka is completed", Indian Tobacco Association president M.Umamaheswara Rao said.

E-auction was delayed by a week due to boycott by traders upset with the new bidding process initiated by the Union Commerce Ministry as demanded by ryots to do away with bids of less than a rupee.

As much as 45 bales were traded in the Ongole I platform with a highest bid of Rs 125 per kg. 'Irrigated pale tobacco' attracted buyers only at Rs 118 per kg, Tobacco Board Regional Manager G Bhaskar Reddy said.

Mr Gopal advised his subordinates to give enough time to traders to make their bids in the eight platforms of Ongole I, Podili I and II, Kandukur I and II, Kondepi, Kaligiri and D.C.Palli .

Good news for Bengal gram growers



ONGOLE, February 25, 2014 - *Market Intervention Scheme to be implemented from today*

Bengal gram growers seeking Market Intervention Scheme, in Ongole on Monday. — photo: kommuri srinivas

In a big relief to Bengal gram growers, the market intervention scheme (MIS) will be implemented with full vigour

from Tuesday, according to Prakasam district Collector G.S.R.K.R.Vijaykumar.

After a meeting with ryots on Monday night, the Collector said Bengal gram stock relating to 2013-14 lying in cold storage units would be purchased at Rs. 3,500 per quintal and fresh crop at Rs. 3,100 by the MARKFED. A G.O. was issued to the effect by the State government on Saturday.

Earlier in the day, farmers led by All India Kisan Sabha central committee member N. Ranga Rao staged a demonstration upset over the delay in implementation of the Market Intervention Scheme (MIS) for which the State had sanctioned Rs. 75 crore and released Rs. 50 crore.

Over 11.50 lakh quintals of Bengal gram produced in 2012-13 rabi season could not be marketed in view of the fall in its price, Acharya N.G. Ranga Kisan Samastha general secretary Ch. Seshaiiah said.

A delegation of farmer leaders urged the district administration to open seven buying points and purchase Bengal gram straight from cold storage units to save on transportation cost to ryots.

The growers had incurred a heavy loss with the price of the principal pulse crop plummeting to less than Rs. 3,000 per quintal from Rs. 5,000 per quintal last year, Andhra Pradesh Rythu Sangam district secretary D. Gopinath said. "The growers are a worried lot as the price is expected to touch a new low in view of higher domestic production this year," said APRS-led Bengal Gram Growers Association secretary K. Ramakoteswara Rao said. The MIS envisages purchase of both desi and hybrid varieties at Rs. 3,500 per quintal at a time when the desi variety is available at about Rs. 2,700 per quintal and hybrid variety at Rs. 3,000 per quintal in the open market.

Irrigation system work to start early

Rs. 2.90 crore allotted for 79 works in Kanyakumari

Maintenance work for Kodayar irrigation system for the year 2014-15 will begin this month itself so that it can be completed during the summer season (March-May).

Collector S. Nagarajan said here on Monday that Rs. 2.90 crore had been allotted for 79 irrigation works in Kanyakumari district. The Kodayar irrigation system, with the Pechiparai dam as pivot and Perunchani, Chittar 1 and Chittar 11 dams as additional storage, irrigated 79,000 acres in the district. This system received rainfall during both the southwest monsoon (June-August) and northeast monsoon (October-December). The dams were usually closed from March 1 to May 31 every year and opened for irrigation by June 1 (though in the past few years, it was delayed by a few days owing to insufficient storage). Since the Travancore samasthanam days, the maintenance work was taken up between March and May when the dams are closed. Since the financial year began on April 1, funds for maintenance were received only in June and the work could be taken up at the end of the financial year for one month, Mr. Nagarajan said.

But S. K. Subramanian, Executive Engineer, Public Works Department (Water Resources Organisation), along with the district administration, took the initiative to get permission from the government for starting the maintenance work for 2014-15 before March 1. Now, a long period of three months is available for undertaking works such as desilting, reconstruction, maintenance of sluices and weirs.

10 outlets to sell fresh vegetables



COIMBATORE, February 25, 2014 - With the intent of helping vegetable farmers get a good price and consumers fresh vegetables, the State Government has opened 10 outlets in the city. Chief Minister Jayalalithaa inaugurated the shops from Chennai on Monday. According to a release from the district administration, the shops would function from Monday to Saturday from 7am to

11am and from 5 p.m. to 7pm at Flower Market, Thadagam Road (Aavin complex), Telugupalayam Primary Agriculture Cooperative Credit Society complex, Chinthamani headquarters, Chinthamani kerosene distribution centre on N.S.R. Road, Coimbatore District Library Authority building complex in Town Hall, Coimbatore Corporation Shopping Complex, Tatabad, TUCAS building premises, Thudiyalur, P.N. Pudur, and Ondipudur Urban Cooperative Credit Society.

These outlets would source vegetables from Thondamuthur, Pollachi, Mettupalayam, and Karamadai in Coimbatore district, The Nilgiris, Tirupur, and Dindigul districts, where members of the cooperative societies would procure the vegetables at farm gate from farmers.

Such an arrangement would ensure that consumers got the best quality vegetables at a competitive price and also spare the farmers from loading and unloading prices and transport cost. The farmers also need not pay the storage cost.

Water level

Mettur - The water level in the Mettur dam stood at 50.18 feet on Monday against its full level of 120 feet. The inflow was 683 cusecs and the discharge 2,000 cusecs.

The water level in Papanasam dam on Monday stood at 54.75 feet (permissible level is 143 feet). The dam had an inflow of 132.87 cusecs and 504.75 cusecs of water was discharged. The level in Manimuthar dam stood at 73.48 feet (118 feet). The dam had an inflow of 17 cusecs and 33 cusecs of water was discharged.

Kanyakumari

The water level in Pechipparai dam stood at 11.95 feet, 41.70 feet in Perunchani, 4.26 feet in Chittar I, 4.14 feet in Chittar II, 3.80 feet in Poigai and 40.94 feet in Mambazhathuraiyaru.

Paddy procurement centres at six places

TUTICORIN, February 25, 2014 - Direct paddy procurement centres have been set up at six places in Srivaikuntam, Tiruchendur and Tuticorin taluks in the district.

Joint Director of Agriculture N.K. Dhakshinamoorthy said here on Monday that the centres had been opened at Srivaikuntam, Kurumbur, Nazareth, Vasavappapuram, Iruvappapuram and Kulayankarisal. The paddy procurement price had been fixed at Rs. 1,360 for one quintal of common variety and Rs. 1,415 for Grade –A variety.

Paddy harvesting was in progress at some places in the district. During ‘kar’ and ‘pisanam’ seasons last year, paddy was cultivated on 9, 863 hectares. Since the start of 2014, the crop had been raised on 1,781 hectares.

Paddy cultivation had been taken up under summer crop package as per a directive of Collector M. Ravikumar. Four blocks with potential were identified. Under the package, the government had set a target to cover 2,600 hectares at Srivaikuntam, Alwarthirunagari, Karungulam and some parts of Tuticorin. Owing to late planting in Tiruchendur, the harvest was expected by April. With just a month away, he said the officials were hopeful of achieving the target. He said 819 more hectares would be covered under this programme by the end of March.

Paddy price raised by Re.1

THIRUVANANTHAPURAM, February 25, 2014 - The Kerala Cabinet on Monday decided to hike the procurement price for paddy from Rs.18 to Rs.19 a kg.

The one-rupee hike will be applicable for paddy already procured during the current season for which payments have not been made.

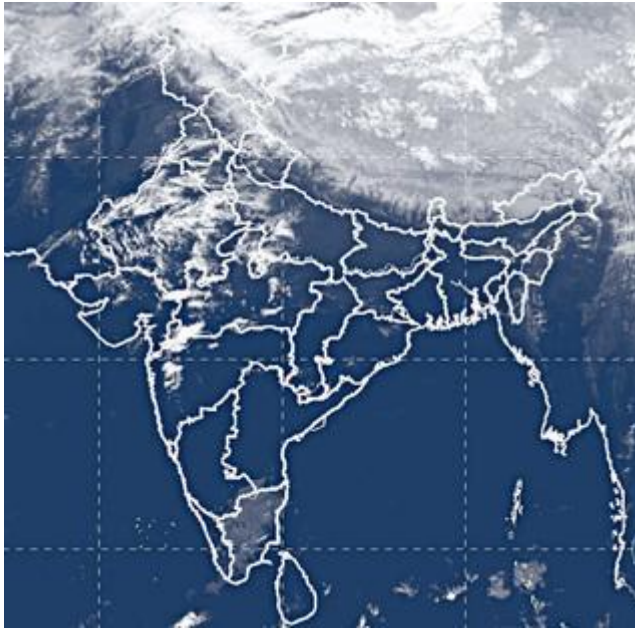
Chief Minister Oommen Chandy told the media after a special Cabinet meeting that the Centre was offering a procurement price of Rs.13.10 a kg for paddy.

The State had been providing a subsidy of Rs.4.90 a kg over that. Now, this subsidy component would be Rs.5.90 a kg. He said the State had sought a special package from the Centre for the Fertilisers and Chemicals Travancore (FACT) in Kochi.

The Centre had sought some tax concessions from the State government for the company and the Cabinet had decided to consider the matter favourably.

Mr. Chandy said the next meeting of the Cabinet would decide on government takeover of the Cooperative Medical College at Pariyaram. The Chief Minister said the medical insurance scheme introduced for police personnel would be extended to staff of the Jail and the Fire and Rescue Services departments.

Weather



INSAT PICTURE AT 11-30 hrs. Observations recorded at 8-30 a.m. on February 24.

ANDHRA PRADESH

Anantapur	33	19	0	0
Arogyavaram	31	16	0	0
Bapatla	30	18	0	3
Calingapatnam	29	19	0	0
Gannavaram	30	19	0	22
Hanamkonda	35	19	0	0
Hyderabad AP	30	19	0	1
Kakinada	32	21	0	1
Khammam	32	20	0	0
Kavali	30	19	0	9
Kurnool	34	19	0	0
Mahabubnagar	33	19	0	0
Machilipatnam	29	20	0	0
Nandyal	33	19	0	12
Narasapur	31	19	0	0
Nellore	31	21	0	10
Nizamabad	34	21	0	0
Ongole	31	19	0	2
Ramagundam	31	21	0	0
Tirupathi AP	32	19	0	3
Tuni	29	20	0	0
Vizag AP	31	20	0	3
Vizag	30	21	0	19

KARNATAKA

Agumbe	33	13	0	0
Bangalore AP	30	15	0	0
Bangalore	32	17	0	0
Bagalkote	—	—	—	—
Belgaum AP	33	18	0	0
Bellary	36	17	0	0
Bijapur	33	19	0	0
Chitradurga	34	17	0	0
Chickmagalur	29	16	0	0
Gadag	33	19	0	0

Gulbarga	34	20	0	0
Hassan	33	14	0	0
Honavar	33	22	0	0
Karwar	33	22	0	0
Madikeri	26	14	0	5
Mangalore AP	33	23	0	0
Mysore	32	18	0	0
Mandya	32	18	0	tr
Panambur	33	24	0	0
Raichur	33	19	0	0
Shirali	34	22	0	0
KERALA				
Alappuzha	32	23	0	53
Kannur	35	25	0	5
Kochi AP	32	23	0	4
Kottayam	33	22	0	6
Kozhikode	34	25	0	tr
Punalur	35	22	0	16
Thiruvanantha				
-puram AP	31	24	0	187
Thiruvanantha				
-puram City	33	24	0	55
Vellanikkara	35	24	0	0
TAMIL NADU				
Adiramapattinam	33	23	2	14
Chennai	30	24	tr	10
Chennai AP	31	23	1	7
Coimbatore AP	32	21	0	0
Coonoor	21	11	0	92
Cuddalore	31	21	5	6
Dharmapuri	33	19	0	0
Kanyakumari	33	25	0	85
Karaikal	30	24	1	8
Kodaikanal	18	9	0	17
Madurai AP	35	23	0	10
Nagapattinam	30	25	4	12
Palayamkottai	35	24	0	31
Pamban	30	25	0	63
Parangipettai	31	22	10	16
Puducherry	32	22	5	10
Salem	34	19	0	0
Thanjavur	33	23	0	1
Tiruchi AP	33	22	tr	tr
Tiruchi	—	—	—	—
Tirupattur	34	19	0	9
Tiruttani	33	19	0	4
Tondi	31	23	26	70
Tuticorin	32	23	11	34
Ooty	20	9	0	1
Valparai	28	11	0	14
Vellore	33	21	0	1
LAKSHADWEEP				
Amini Divi	34	26	0	74
Minicoy	32	26	0	12
Kavarathi	—	—	—	—
OTHER STATIONS				
Kolkata (Alipore)	30	19	0	41

Mumbai 28 22 0 9
New Delhi 22 10 0 50

The columns show maximum and minimum temperature in Celsius, rainfall during last 24 hours (trace) and total rainfall in mm since January 01, 2014.

DRY WEATHER
IN A.P.

CHENNAI: Isolated rainfall occurred over Tamil Nadu and Kerala. Mainly dry weather prevailed over north interior Karnataka and dry weather prevailed over Andhra Pradesh, Lakshadweep, coastal and south interior Karnataka.

The minimum temperature fell appreciably at one or two places over north interior Karnataka, fell at one or two places over Telangana, north coastal Andhra Pradesh, north interior Karnataka, rose appreciably at one or two places over coastal Tamil Nadu, rose at one or two places over rest north interior Karnataka, coastal Tamil Nadu and changed little elsewhere over the region. They were appreciably below normal at one or two places over coastal Andhra Pradesh, Rayalaseema and interior Karnataka, below normal at one or two places over north coastal Andhra Pradesh, appreciably above normal at one or two places over coastal Karnataka and Telangana, above normal at one or two places over north interior Karnataka and Telangana.

FORECAST (valid until Wednesday morning): Rain or thundershowers would occur at a few places over coastal Tamil Nadu and Puducherry. Isolated rain or thundershowers may occur over Kerala, Lakshadweep and interior Tamil Nadu. Mainly dry weather will prevail over Karnataka and dry weather will prevail over A.P.

hindustantimes

Weather

Chennai - INDIA

Today's Weather



Sunny

Tuesday, Feb 25

Max Min

29° | 22°

Rain: 0

Humidity: 83

Wind: normal

Sunrise: 06:28

Sunset: 06:16

Barometer: 1015

Tomorrow's Forecast



Partly Cloudy

Wednesday, Feb 26

Max Min

28° | 24°

Extended Forecast for a week

Thursday

Feb 27



30° | 21°

Partly Cloudy

Friday

Feb 28



30° | 21°

Partly Cloudy

Saturday

Mar 1



26° | 23°

Overcast

Sunday

Mar 2



25° | 22°

Cloudy

Monday

Mar 3



25° | 22°

Overcast

Global black tea output up 7.47%

Coonoor, February 24: Kenya's December 2013 tea production data which has just come out show that there was a marginal rise of 0.32 million kg (mkg) to reach 41.72 mkg. Because of significantly higher production in earlier months, Kenyan tea industry has created history by exceeding 400-mkg-mark for the first time in its annals. In 2013, its production rose by 62.88 mkg over 2012 to reach 432.45 mkg. This was the second largest increase after 73.71 mkg posted by India to reach a record 1,200.04 mkg. Indian tea industry also created history by crossing 1,200 mkg for the first time in its history. India topped the global black tea table accounting for as much as 54.45 per cent of the total world output. Kenya followed at a distant second accounting for 19.61 per cent share. Sri Lanka produced 336.76 mkg.

Cardamom flavour intact on good export demand



Kochi, February 24: Export buying kept the cardamom prices firm last week at auctions in Kerala and Tamil Nadu. Exporters bought available exportable grade capsules and that, in turn, pushed prices up. They purchased an estimated 70 tonnes of cardamom last week, said market sources in Bodinayakannur. Other grades arrived in the market were bought by upcountry dealers. Shortage of sufficient quantity of exportable grade

capsules continued.

Meanwhile, as the weather has been unfavourable from the beginning of this year without showers, there is a bullish sentiment building up in the market. In the past couple of years there wasn't a break in supply because of rains and that led to continuous flowering, yielding and harvesting.

As a result, there was a continuous flow of cardamom into the market throughout the year. But, this year a gap in between both the seasons is most likely, they said.

Notwithstanding this, there could be a temporary slow down in the market if the rains fail in the coming days. Harvesting of the current season is over.

No material comes from the estates now and whatever capsules arrive, currently, is from the stocks held by growers and the primary market dealers, trade sources in Kumily said. Ever since prices began to surge, some growers have started releasing stocks they are holding.

Exporters have good orders on hand and they are expected to stay in the market buying whatever material available till September-October, when the Guatemalan crop hits the market.

During the current season of the crop to July, arrivals as on February 23 were 15,053 tonnes against 8,529 tonnes during the same period a year ago.

Sales were 14,674 tonnes against 8,085 tonnes. The weighted average price as on February 23 was Rs. 599.52 a kg (Rs. 768.82). The maximum price was Rs. 919 and the minimum Rs. 449 a kg.

The auction average increased to Rs. 666 (Rs. 653.44) the previous Sunday, PC Punnoose, General Manager, CPMC, said.

Prices of all graded varieties (Rs. /kg): AGEB 820-830; AGB 660-670; AGS 620-630; and AGS - 1: 605-615.

Mahyco develops genetically modified crops sans Monsanto support



Company aims to forge independent agri-biotech identity

The next frontier Dr Usha Barwale Zehr, Chief Technology Officer, Mahyco.

Jalna (Maharashtra), February 24: Maharashtra Hybrid Seeds Company (Mahyco) is seeking regulatory approvals for field trials in genetically modified (GM) rice and cotton lines that can grow under water-stressed and saline environments, besides requiring less nitrogen fertilisers.

The Rs. 700-crore company has

developed these new plants using proprietary genes belonging to Arcadia Biosciences, a privately-held agri-biotech firm headquartered in Davis, California.

This is a departure from the past when Mahyco relied on the US life sciences giant Monsanto – which holds 26 per cent in it – for either GM technology or genes.

Mahyco-Monsanto Biotech, a 50:50 joint venture between the two companies, is currently the Indian licensee for Bt cotton incorporating Monsanto's Bollgard and Bollgard II technology events.

Even in Bt brinjal, where the 'event' *per se* – the process of integrating the foreign gene, including developing protocols and identifying the specific location in the host plant's genome where the insertion is to happen – was that of Mahyco, the specific 'cry1Ac' gene was sourced from Monsanto.

Mahyco has used Monsanto's cry1Ac gene – isolated from a soil bacteria, *Bacillus thuringiensis* or Bt – to also develop its own Bt rice and okra (*bhindi*). The cry1Ac gene confers resistance to American bollworm in cotton, fruit-and-shoot borer in brinjal, fruit borer in okra, and yellow stem borer in rice by producing proteins toxic to these insect pests.

Beyond Monsanto

Obtaining genes from multiple sources is part of the company's efforts to move up the technology value chain, Dr Usha Barwale Zehr, Mahyco's Chief Technology Officer, told *Business Line* .

Thus, while being a licensee for Bollgard was the first step, Bt brinjal was the second, and accessing genes from other than Monsanto the third. The next step would be to develop the company's own genes in-house. Mahyco has obtained three genes from Arcadia Biosciences.

The first one is an 'iso-pentenyl-transferase' gene derived from *Agrobacterium tumefaciens* – another soil bacterium which stimulates production of proteins that delay drought-induced senescence or aging of plants. Plants incorporating the gene are able to tolerate water stress.

“If the normal yield for a cotton hybrid is 10 quintals/acre, which may drop to 4-5 quintals due to water shortage, this technology can help produce 7-8 quintals. We have introduced the gene to develop drought-resistant rice and cotton lines,” said Dr Zehr.

The second is a ‘sodium proton exchanger’ gene from rice that suppresses flow of salts from the roots to the shoots of plants. This has been used to create ‘cisgenic’ rice – a GM plant where the gene inserted through recombinant DNA technology is from the same species – that can grow even in saline soils. The third is an ‘alanine-aminotransferase’ gene from barley that can enhance nitrogen uptake and utilisation by plants. Since crops typically absorb barely half of the nitrogen in fertilisers that farmers apply, this gene – Mahyco has incorporated it in cotton lines – could enable them to use less number of bags. “We have conducted greenhouse trials in the lines containing all the three genes. The results are promising, but need replication under field conditions. We have applied to the Genetic Engineering Appraisal Committee for event selection field trials,” informed Dr Zehr.

Event selection tests are carried out in one or two locations to identify candidate lines that can be further tested out in bio-safety research level-1 and 2 (BRL I/BRL II) field trials. BRL I trials are usually done on one-acre plots at a minimum of two locations/region for two years. This is accompanied by animal feeding and other studies to evaluate toxicity of the GM crops. The BRL II trials that follow are on larger 2.5-acre fields over one growing season. The Government has currently stopped giving clearances for any field trial, including for event selection. While Mahyco’s Bt brinjal did not get commercialisation approvals even after completing all field trials and bio-safety studies, its Bt rice and okra haven’t progressed beyond BLR I stage.

“We spend 10 per cent of our annual turnover on research. Sustaining these investments is difficult if we cannot even undertake field trials of our events,”, added Dr Zehr.

The writer was at Jalna, Maharashtra at the company’s invitation

Going separate ways?

Diversifying its sources of genes for developing new genetically modified (GM) crop lines is not the only sign of Mahyco attempting to build a biotech research firm identity independent of Monsanto.

There is equal evidence of distance coming from Monsanto’s side as well.

The best indicator is GM maize: Unlike in Bollgard cotton – where the Indian licensee is a 50:50 joint venture between Mahyco and Monsanto – the American life sciences major has sought to introduce its ‘stacked’ three-gene transgenic corn hybrids through Monsanto India Ltd, in which Mahyco has no stake.

Monsanto’s GM corn, which is yet to receive regulatory clearances in India, has three genes. Two of them are Bt genes coding for proteins that acts against a broad spectrum of lepidopteran insect pests (similar to that for Bt cotton).

The third gene allows the maize hybrids to be tolerant to application of glyphosate herbicides that Monsanto now markets under the Roundup brand.

The fact that Monsanto has chosen to bring GM maize to India via its own subsidiary, rather than its existing joint venture with Mahyco, shows how both companies seem to be pursuing independent paths.

Stockists stay away from sugar trade

Mumbai, February 24: STOCKISTS KEEP OFF SUGAR MARKET

Sugar prices on spot and futures markets ruled divergent on Monday. On the Vashi spot market, prices ruled steady on routine supply and demand, while on futures market prices dropped on higher selling pressure. *Naka* and mill tender rates were unchanged with minor changes. Freight rates were steady at higher level, said sources. Arrivals at Vashi market was

around 58-59 truckloads (of 100 bags each) while local dispatches were 58-60 truck loads. On Saturday, 17-18 mills offered tenders and sold 53,000-55,000 bags at Rs. 2,550-2,670 (Rs. 2,550-2,670) for S-grade and Rs. 2,750-2,810 (Rs. 2,750-2,810) for M-grade. *Naka* delivery rates were: S-grade Rs. 2,700-2,800 (Rs. 2,700-2,800) and M-grade Rs. 2,830-2,930 (Rs. 2,830-2,935).Our Correspondent

Refineries hike palmolein rates

Mumbai, February 24: The sentiment in the edible oils market was positive on Monday tracking firm futures markets, despite lower volumes.

On the Bombay Commodity Exchange, spot rate for palmolein and cotton refined oil increased by Rs. 4 and Rs. 3 for 10 kg respectively. On firm opening of futures, local refineries increased their rates for palmolein by Rs. 5. Resellers offloaded about 150-200 tonnes of palmolein at Rs. 611-612 for ready delivery and Rs. 620 for March.Our Correspondent

Rice prices drops further

Karnal, February 24: RICE PRICES DROP

Proving all expectations wrong, the rice market fell on Monday, with priced of Pusa-1121 and Sharbati variety dropping by Rs. 100-300 a quintal. Listless buying pulled prices down, said Amit Chandna, proprietor of Hanuman Rice Trading Company. Traders expect it's unlikely to see a major drop from here and the market may take some time to recover, he said. In the physical market, Pusa-1121 (steam) dropped by Rs. 300 and sold at Rs. 8,700-8,800, while Pusa-1121 (sela) quoted at Rs. 7,750, Rs. 250 down. Pure Basmati (Raw) quoted at Rs. 12,200. Duplicate basmati (steam) sold at Rs. 7,000 a quintal. About 2,000 bags of Pusa-1121 arrived and went for Rs. 4,200 a quintal.Our Correspondent

Turmeric loses sheen on slack demand

Erode, February 24: TURMERIC LOSES SHEEN

Spot turmeric prices in Erode markets decreased on account of heavy inflow and lack of upcountry orders. Already because of heavy arrival last week, prices dropped by Rs. 100. Further, on Monday, arrival of turmeric bags shot up to 25,000 bags in Nizamabad market. On Monday, 4,000 bags of turmeric arrived for sale and 1,200 bags were new crop. The buyers quoting Rs. 6,600-6,800 purchased all the new crop. Of the remaining 2,800 bags of old crop, only 860 were sold. Due to the arrival of poor quality hybrid finger turmeric, prices dropped to Rs. 6,769. . At the Erode Turmeric Merchants Association Sales yard, the finger variety (new crop) sold at Rs. 5,469-6,869 a quintal; the root variety Rs. 5,339-6,509. The finger variety (old crop) sold at Rs. 4,519-6,468; the root variety Rs. 3,509-6,307.Our Correspondent

Rubber continues to skid

Kottayam, February 24: Spot rubber prices continued to rule weak on Monday.

The market opened almost steady but the absence of follow-up buying at higher levels kept it under pressure and the prices fell from the recent peak on buyer resistance. The trend was partially mixed.

Sheet rubber declined to Rs. 145 (Rs. 147) a kg, according to traders.

The grade was quoted weak at Rs. 145(Rs. 148) and Rs. 142 (Rs. 145), respectively, by the Rubber Board and dealers. March futures weakened to Rs. 145.75 (Rs. 147.08), April to Rs. 150.25 (Rs. 152.07), May to Rs. 153.70 (Rs. 155.03), June to Rs. 155.79 (Rs. 155.93) and July to Rs. 154.60 (Rs. 154.87) on the National Multi Commodity Exchange.

RSS 3 (spot) dropped to Rs. 134.27 (Rs. 136.19) at Bangkok. The February futures closed at ₹217 (Rs. 131.48) on the Tokyo Commodity Exchange.

Spot rubber rates (Rs. /kg)were: RSS-4: 145 (147) RSS-5: 143 (145) Ungraded: 140 (144) ISNR 20: 143 (147) and Latex 60%: 120 (120).

The not-so-whole 9 yards: AP spins past Karnataka in silk production

Bangalore, February 24: At 1.92 lakh hectares, the area under mulberry silk area has increased only marginally in the country between 2007-08 and 2012-13. Major mulberry silk growerKarnataka witnessed a drastic drop in area by 54.51 per cent to 41,592 hectares against total area of 91,434 hectares in 2007-08, said Comptroller and Auditor General (CAG) in its 'Karnataka's Economic sector report' tabled in the State Assembly.

As of March 2013, the net area under mulberry cultivation stood at 74,128 hectares against 91,434 hectares at the beginning of 2008-09, a drop of 17,306 hectares.

"Reduction in area was due to uprooting of 55,694 hectares which was more than the area added during the period. Further, the new area added was only 38,388 hectares as against the target of 1.22 lakh hectares for the period 2008-13," CAG said.

CAG, quoting Central Silk Board (CSB) figures, said that Tamil Nadu also saw a decline in area by 24.93 per cent to 10,545 hectares in 2012-13 against 14,047 hectares in 2007-08.

However, total area in Andhra Pradesh increased by 18.22 per cent from 35,180 hectares in 2007-08 to 41,592 hectares at the end of 2012-13.

"The success in Andhra Pradesh is attributed to scrupulous implementation of improved packages for mulberry cultivation," the report said.

Productivity

The national average of raw silk production ranged between 87.73 and 105.75 kg/hectare per year during 2008-13. Karnataka's productivity ranged between 89.65 and 117.04 kg/ha per year.

Karnataka's Commissioner for Sericulture Department attributed drought conditions for low productivity during 2009-10 and shortage of technical staff for lesser productivity for the years 2011-12 and 2012-13.

"The reply was not acceptable as there was above the normal rainfall during the period and staff requirement was surplus to meet the target of one lakh hectares for 2012," CAG said.

Further, Karnataka achieved the highest productivity of 117.04 kg.

Business Standard

Chana up 0.6% on strong spot demand

Amid strong domestic demand, [chana](#) prices rose 0.63% to Rs 3,013 per quintal in futures trade today as speculators enlarged position.

At the National Commodity and Derivative Exchange, chana for delivery in April rose by Rs 19, or 0.63% to Rs 3,013 per quintal with an open interest of 84,260 lots.

In a similar fashion, the commodity for delivery in May traded higher by similar margin to Rs 3,057 per quintal in 28,230 lots.

Analysts attributed the firmness in chana futures to rising demand at spot market from dal millers against limited arrivals from producing regions.

Palm oil up 0.2% on pick-up in demand

[Crude palm oil](#) prices moved up by 0.21% to Rs 583.50 per 10 kg in futures trading today as participants created speculative positions after pick-up in demand in the spot markets.

At the [Multi Commodity Exchange](#), crude palm oil for delivery in February rose by Rs 1.20, or 0.21%, to Rs 583.50 per 10 kg in a business turnover of 97 lots.

Similarly, the oil for delivery in March traded higher by the same margin to Rs 582.20 per 10 kg in 262 lots.

Analysts said speculative positions built-up by participants after pick-up in spot market demand mainly led to rise in crude palm oil prices at futures trade.

Cardamom up 1.1% on rising spot demand

[Cardamom](#) prices gained 1.14% to Rs 796 per kg in futures trade today as speculators indulged in creating positions on an upsurge in spot market demand.

Further, tight stocks availability in the physical market on restricted arrivals from producing region also supported the uptrend.

At the [Multi Commodity Exchange](#), cardamom for delivery in April rose by Rs 9, or 1.14%, to Rs 796 per kg in business turnover of 135 lots.

Similarly, the spice for delivery in March gained Rs 6.80, or 0.90%, to Rs 764.20 per kg in 375 lots.

Analysts said fresh positions created by speculators on upsurge in demand the spot market amid restricted arrival from producing region mainly led to rise in cardamom prices at futures trade.

Coriander up 1.2% on rising demand

Supported by rising demand in the spot market and restricted supplies from producing regions, [coriander](#) prices rose 1.28% to Rs 9,469 per quintal in futures market today.

At the [National Commodity and Derivative Exchange](#), coriander for delivery in May rose by

Rs 120, or 1.28%, to Rs 9,469 per quintal with an open interest of 25,260 lots.

Similarly, the spice for delivery in April moved up by Rs 115, or 1.25%, to Rs 9,303 per quintal in 45,060 lots.

Analysts said speculators enlarged positions on rising demand in the spot market against restricted supplies from producing regions which influenced coriander prices at futures trade.

Potato down 0.6% on increased supply

[Potato](#) prices declined by 0.65% to Rs 1,170 per quintal in futures trading today as speculators offloaded their positions on increased arrivals from producing regions.

At the [Multi Commodity Exchange](#), potato for delivery in April declined by Rs 7.60, or 0.65%, to Rs 1,170 per quintal in a business turnover of 38 lots.

Potato for delivery in March also traded lower by Rs 5.10, or 0.44%, to Rs 1,153.90 per quintal in 56 lots.

Marketmen said offloading of positions by speculators on increased arrivals from growing belts against subdued demand, mainly pulled down potato prices at futures trade.

Refined soya oil up 0.2% on pick-up in demand

[Refined soya oil](#) traded higher by 0.25% to Rs 695.40 per 10 kg in futures trade today as speculators created positions amid pick-up in domestic demand due to the ongoing marriage season.

At the [National Commodity and Derivatives Exchange](#), refined soya oil for delivery in May rose by Rs 1.70, or 0.25%, to Rs 695.40 per 10 kg with an open interest of 52,580 lots.

Similarly, the oil for delivery in May edged up by Rs 1.55, or 0.22%, to Rs 704.65 per 10 kg in 87,310 lots.

Analysts said speculators created fresh positions on pick-up in demand in the spot market, supported by ongoing wedding season that led to the rise in refined soya oil prices at futures trade.

Home castorseed output to fall with lower sowing

India's [castorseed output](#) is likely to decline by 17 per cent this year, with a shift by farmers to more remunerative crops. Cotton was the biggest beneficiary.

A study by Nielsen India on behalf of castorseed processors, crushers and retailers points to

a total output of 1.12 million tonnes (mt) this marketing season (July 2013-June 2014), as compared to 1.35 mt the previous year. Castorseed is a kharif crop, sown ahead of the monsoon and harvested towards the end of the 90-day season.

The study estimates castorseed sowing to decline 16 per cent to 916,000 hectares (ha) this season, against 1.096 million ha in the previous one. Andhra Pradesh, the second largest producer state after Gujarat, sees a fall in both production and sowing by 32 per cent and 31 per cent, respectively; in Gujarat, both are down 14 per cent. In Rajasthan, sowing is down six per cent and output by a steep 17 per cent.

“Cotton has been a preferred choice for farmers, offering assured and higher returns. There is a great amount of confidence for government intervention if the price falls below the minimum support price, which is not the case for castorseed,” said Rajubhai Pobaru, a castorseed trader in Ahmedabad.

At the current Rs 11,951 a quintal, cotton has offered 16.4 per cent return in one year, against 11.2 per cent (to Rs 3,975 a quintal) profit generated by castorseed.

The study showed a marginal decline in [yield](#) due to vagaries of nature, to 1,223 kg per ha this year as compared to 1,229 kg per ha the previous year. India supplies around 90 per cent of the world demand.

CASTORSEED PRODUCTION			
In '000 tonnes			
States	2012-13	2013-14E	% change
Gujarat	967	828	-14
Rajasthan	200	166	-17
Andhra Pradesh	150	102	-32
Others	30	24	-20
Total	1,347	1,120	-17

E= Estimates Source: Nielsen study

The global castor oil industry has grown in line with the global growth in gross domestic product, of two to three 2-3 per cent per annum. In contrast, the Indian industry saw eight to 10 per cent yearly growth over the past decade. This difference is mainly

attributed to crop failures or reduction in crop sizes in Brazil and China over the years.

“It is, thus, very important to have price stability, to give the confidence to world consumers that India is serious in castor and will meet the required demand at reasonable and competitive prices,” said B V Mehta, executive director, Solvent Extractors’ Association.

The carry-over from a higher crop in 2012 helped in the growth of the Indian castor oil industry. India’s castor oil exports were 500,000 tonnes during calendar year 2013, against 425,000 tonnes in 2012.
