

## Food experts call for Good Manufacturing Practices

---

*Certificates on ripening of fruits provided by the dealers and suppliers could curb artificial ripening*



*Calcium carbide, ethylene gases trigger ripening process Use of carbide gas in ripening of fruits has been prohibited*

KOCHI, April 21, 2014 - Food safety experts have called for the introduction of guidelines, including Good Manufacturing Practices (GMP), for ripening of fruits following reports of the use of chemicals for ripening mangoes.

The Kochi City police seized 40 kg of mangoes on Saturday, suspected to be ripened using calcium carbide, from a fruit stall at Nettoor market. Besides the mangoes, the police also seized five kg of

calcium carbide and detained Sanu, 38, of Nettoor, who operated the stall.

The introduction of GMP for ripening of fruits for domestic markets can address the issue to a considerable extent, says M.K. Mukundan, the director of Council for Food Research Development, Konni. Dealers and suppliers of fruits need to be made to follow a set of procedures for ripening of fruits and its storage. Certificates regarding the ripening of fruits should be provided by the dealers and suppliers. They should be asked to follow GMP for ripening methods. The premises used for ripening and storage should also be certified, suggests Dr. Mukundan.

Acetylene and ethylene gases trigger ripening process. Introduction of smoke fumes, as followed in the traditional methods of ripening, helps trigger the process, he says.

The Food Safety and Standards Act has prohibited the use of carbide gas in ripening of fruits. The Act specifies that "no person shall sell or offer or expose for sale or have in his premises for the purpose of sale under any description, fruits which have been artificially ripened by use of acetylene gas, commonly known as carbide gas." However, the use of ethylene gas (fruit ripening plant hormone) in low concentration has been permitted to trigger the ripening of fruits.

K. Ajithkumar, the designated officer of the Food Safety and Standards Act, says the law permits only natural ripening of fruits. He too suggested following of GMP for ripening of fruits. Law prescribes a punishment of imprisonment up to two years and fine up to Rs. 5 lakh for the use of carbide gas, often used for inducing uniform ripening of fruits, he says. Though the traces of the chemicals can be identified in labs, the consumers of fruits can escape the ill-effects of the use of calcium carbide gas by thoroughly washing the fruits. Peeling off the skin of the fruits would also help in avoiding the chemicals, he suggests.

While buying fruits like mangoes, avoid the fruits which don't have the natural aberrations and black spots on them. Also avoid fruits which are found covered with white powder, he says

---

☞ ***Calcium carbide, ethylene gases trigger ripening process***

☞ ***Use of carbide gas in ripening of fruits has been prohibited***

---

# Organic food market takes off



*The HinduCentre for Sustainable Agriculture Director G.V. Ramanjaneyulu (middle) addressing a seminar on organic farming in Vijayawada on Saturday. Photo: Ch. Vijaya Bhaskar*

*Farmers can achieve better yield, but they are struggling to market organic products owing to lack of government support*

Organic food market in India is expanding at a staggering rate of 400 per cent every year according to a report published by Confederation of Indian Industry (CII) but the farmers are unable to realise the full potential of the crops grown with natural fertilizer.

It is because they are marginalised by the government which extended maximum support to corporate entities, said G.V. Ramanjaneyulu, Director of Secunderabad-based Centre for Sustainable Agriculture (CSA).

Addressing a seminar on organic farming at Andhra Chamber of Commerce and Industry (ACCI) here on Saturday, Mr. Ramanjaneyulu said empirical data gathered from about nine lakh farmers across the country proved that the difference in yields of organic and conventional systems of agriculture was just about five per cent.

The cost of production came down by 10 to 15 per cent and returns were higher by at least 10 per cent.

Farmers were able to achieve better yields but they struggled in marketing the organic products due to the lack of government support. Post-harvest and supply chain issues bothered the farmers and the government rarely came to their rescue.

Mr. Ramanjaneyulu stressed the need for a major shift in fertilizer usage from NPK to organic manures and chemical-based pesticides which have high concentrations of heavy metals, to eco-friendly substances.

The rising costs and inability of farmers to sustain the present levels of production were issues of concern around the world and the only long-term solution was organic farming. A global action plan and concerted action were essential to deal with the imminent crises in agriculture sector in which technology plays a limited role, the CSA Director observed. ACCI Chairman M. Murali Krishna and former ZP chairman Kadiyala Raghava Rao were present.

# Udupi's brinjal to go places

---



*The Hindu* Freshly-picked Mattu Gullas. Photo: A.J. Vinayak

The famed 'Mattu Gulla', a special variety of brinjal, grown in and around Mattu village in Udupi district in Karnataka, is likely to be made available not just in Mumbai and other Indian cities but also the Gulf countries by October this year, if

everything goes according to the plans of the growers.

This brinjal, which enjoys the Geographical Indication (GI) tag, is sought after because of its unique taste. Nearly 200 farmers grow this brinjal on about 150 acres of land in Mattu and its surrounding hamlets such as Kopla, Kaipunjil, Uliyargoli and Pangala.

Although 'Mattu Gulla' is sold in Udupi and Dakshina Kannada districts, it has not been marketed in other places. Growers too do not get a good price for their produce. But the Mattu Gulla Growers Association has decided that they will not sell their produce to middlemen from the next season beginning in October.

The association has also decided to introduce cold storage facilities to increase the shelf life of 'Mattu Gulla'. "The association will take up the marketing of the brinjal from the next season. This will ensure better price for the growers. We want the 'Mattu Gulla' to be marketed in Bangalore, Mumbai and also the Gulf," said Mohan Rao, treasurer.

The association has already applied to the Trade Mark Registration Office in Chennai to register 'Mattu Gulla' as a brand name with a logo carrying its (Association's) name. According to B.P. Satish, Deputy Director of Horticulture, the brand name along with a logo was expected to be approved within a month.

'Mattu Gulla' is a seasonal vegetable and its seeds are sown in September after the monsoon. It is available from January to May. There is high demand as soon as it enters the market. Farmers sell it at Rs. 2,000 to Rs. 3,000 per sack (about 50 kg) at the beginning of the season. The yield ranges from 10 to 13 tonnes per acre per week.

"Once we get the brand name and logo for our 'Mattu Gulla', buyers too would be assured of the quality. Additionally, if the government chips in with funds for marketing and cold storage, this vegetable will become popular in other parts of the state and country," said M. Lakshman, a farmer.

# Rain hits horticulture crops in Chitradurga

---

CHITRADURGA, April 21, 2014 - The untimely heavy rain coupled with hailstorm that lashed different parts of Chitradurga district last week has worsened the condition of farmers who had been bearing the brunt of two consecutive years of drought.

According to official sources, the hailstorm destroyed horticulture crops on more than 521 hectares in Chitradurga, Hiriya and Chalakere taluks and the crop loss has been estimated at Rs. 29 crore. The rain in March had also led to crop loss, sources said.

Farmers had borrowed money from different sources expecting a good rain this year. But the untimely showers dashed their hopes and most of them are neck deep in debt.

The sources said onion on 130 hectares worth Rs. 38 lakh, banana on 69 hectares worth Rs. 36.2 lakh, arecanut on 50 hectares worth Rs. 13.3 lakh, pomegranate on 136 hectares worth Rs. 1.63 crore, and papaya on 35 hectares worth Rs. 21.2 lakh were destroyed. Farmers say they will get only a meagre amount as compensation owing to the unscientific methods used for assessing crop loss.

As per the proposals submitted to the State government, the farmers will get Rs. 6 lakh for onion, Rs. 2.5 lakh for banana, Rs. 5 lakh for arecanut, Rs. 10 lakh for pomegranate and Rs. 1 lakh for papaya. Moreover, they will have to wait for nearly a year to get it.

“The compensation provided by the authorities will not be of any help to farmers as they will have to look after their families after repaying their debt. The farmers will continue to suffer from financial crisis if the government fails to follow systematic methods to measure crop loss and provide suitable compensation to farmers,” sources added.

## Upon his terrace, a garden blooms

---

MANGALORE, April 21, 2014 - Vines have begun bearing red grapes on the terrace of a resident's house at Manki Stand.

Blany B D'Souza, staying at Ist Cross, Manki Stand, is growing grapes on the terrace for the consecutive second year. “I harvested 25 k.g. to 30 k.g. red grape last year,” he told *The Hindu* .

His passion is not only for growing grapes but vegetables of different varieties on the terrace.

Mr. D'Souza grew grapes not intentionally but accidentally. It was about two years ago that, he said, a nursery in the city got some vines in a lorry load from Kerala. The nursery had not ordered them and as he was in touch with nursery the nursery man asked Mr. D'Souza if he was interested to take them.

He said he planted two vines on the backyard and allowed it to grow and spread on the terrace. After one-and-half-year of planting the vines bore fruit from April to June last year. “I don't use any chemical fertilisers to any of plants, including that of vegetables. I spray neem mixture to control diseases,” he said.

A quick look around the terrace shows that Mr. D'Souza has grown almost all varieties of local vegetables. It included ash gourd, snake gourd, ridge gourd, pumpkin, cucumber, ivy gourd, bottle gourd, brinjal, ladies finger and the like.

The season of vegetables is August and September, he said. The terrace has also fashion fruit vines which are yet to yield this year.

Mr. D'Souza has planted a lychee fruit plant which is yet to yield.

# Day of hope for nature conservation

---

PATHANAMTHITTA, April 21, 2014 - Easter also marked a day of hope and promise for nature conservation and protection of land and its cultural heritage, said Fr. Sam Shine, vicar of the St. Sebastian's Catholic Church at Aranmula.

Fr. Shine was delivering the Easter message on Sunday at the venue of the indefinite satyagraha launched by the People's Joint Action Council chaired by poet Sugathakumari, protesting against the controversial airport project at Aranmula.

Those who crucified Jesus Christ at Calvary were under the impression that everything was finished. But the resurrection of Christ on the third day of the crucifixion had proved their inference wrong, leaving the message to the humanity that nothing in the world could be termed last, he said.

## **The message**

The Biblical message that had taught man the importance of nature conservation should continue to echo at the satyagraha venue and the entire Aranmula village, Fr. Shine said. Church office-bearers also distributed sweets at the venue. R.S. Maniyan, Tamil Viswa Brahmana Samoohom State general secretary, inaugurated the meeting. P. Ramachandran Nair, Pathanamthitta Poura Samiti president; P. Prasad, Communist Party of India district secretary, and P.R. Shaji, Aranmula Heritage Village Action Council convener, spoke.

## Water levels

---

The water level in the Mettur Dam stood at 39.98 feet on Sunday against its full reservoir level of 120 feet. The inflow was 166 cusecs and the discharge 6,000 cusecs.

Water level in the Papanasam dam on Sunday stood at 37.80 feet (maximum level is 143 feet). The dam had an inflow of 3.47 cusecs and 104.75 cusecs of water is discharged from the dam.

The level of Manimuthar dam stood at 67 feet (118 feet). The dam had an inflow of 8 cusecs and 200 cusecs of water is discharged.

**Kanyakumari** - The level in Pechipparai dam stood at 13.85 feet, 36.90 feet in Perunchani, 2.92 feet in Chittar 1, 3.02 feet in Chittar 11, 2.10 feet in Poigai and 41.34 feet in Mamabazathuraiyaru.

## To heat eco-city, Turkey looks to 'green gold'

---

Pistachios are already a key ingredient in Turkish baklava, but the country may now have found a new way to exploit the nuts known as "green gold" — by using their shells to heat a new eco-city.

Officials are currently examining plans to build the country's first ecological city with buildings both private and public heated by burning pistachio shells.

And there can be few better locations for such a project than Gaziantep — the south-eastern region close to the Syrian border which produces thousands of tonnes of the nut every year.

"Gaziantep's potential in pistachio production is known, as well as its considerable amount of pistachio shells waste," said Ms. Seda Müftüoğlu Güleç, a green building expert for the municipality.

“We are planning to obtain biogas, a kind of renewable energy, from burning pistachio shells,” she said.

“We thought the ecological city could be heated by burning pistachio shells because when you plan such environment-friendly systems, you take a look at natural resources you have,” she said.

“If the region was abundant in wind power, we would utilise wind energy,” she added.

### **Feasible energy source**

The pistachio-heated new city would encompass 3,200 hectares, and house 200,000 people. It would be located 11 kilometres (six miles) from the province’s capital city, also named Gaziantep.

“Imagine it just like a separate city,” Ms. Güleç said.

If the project bears fruit, pistachio shells formerly regarded as waste could become a new form of energy.

Turkey is one of the world’s biggest producers of pistachios, along with Iran, the United States and Syria, according to the U.N.’s Food and Agriculture Organization.

Last year, it exported 6,800 tonnes of the nut, generating approximately \$80 million (€57 million) in income, up from 4,010 tonnes and \$50 million in 2010, according to the Southeast Anatolia Exporters Union.

Gaziantep alone exported 4,000 tonnes last year, Mr. Mehmet Kahraman, from the union said.

### **A pilot project first**

A pilot project for the new city will run in a small 55-hectare area, before rolling out across the entire city if successful.

The potential of pistachio shells was first uncovered by French environmental engineering company Burgeap which reported last year that the local variety known as Antep was the most feasible source of energy in the region. It said that Antep pistachio shells — with its 19.26 calorific value per kilo — are the most feasible local energy source in the province and that it would be enough to provide heating and cooling for 55 hectares of public buildings. Burgeap said as much as 60 per cent of the area’s heating could be met from renewable energy resources.

The project is still pending approval from local authorities.

While Ms. Güleç declined to provide a firm timeline, she said that if officials at the municipal level reach an agreement — and if private land owners are convinced — it will be implemented in a “very short period of time.” — **AFP**

## A word of caution on pollution

---



*SPREADING MESSAGE: Members of Green Climate at an awareness programme near GVMC office in Visakhapatnam on Sunday. — PHOTO: C.V. SUBRAHMANYAM*

VISAKHAPATNAM, April 21, 2014 - The carbon dioxide level in the air has gone up to an alarming rate of 400 ppm (parts per million) and this would speed up the global warming if not checked, said J.V. Ratnam of Green Climate. He was addressing the gathering at the launch of

the 44th Earth Day week celebration here on Sunday at the Gandhi Statue opposite the GVMC office. He pointed out that steps should be taken immediately to bring down the level of carbon dioxide below 300 ppm. Earth Day is celebrated across the globe on April 22.

Releasing a pamphlet on the occasion, he pointed out that every political party should include the steps that they would take to safeguard the environment in their manifesto. Andhra University Professor and member of Green Climate women's wing C. Manjulatha in her address said that the present economic development model was not environment-friendly and it was time that the government think back of striking a balance between man and nature.

World Wide Children Nature Conservation Club Member Ravi Teja pointed out that as per statistics one death out of eight was caused due to pollution in the air and in 2012 about 43 lakh people died across the globe due to pollution in the ambient air inside homes.

As part of the week-long celebration, volunteers of Green Climate will be distributing over 10,000 pamphlets to create awareness on environment concerns and how to save Mother Earth from disaster.

**hindustantimes**

## Weather

Chennai - INDIA

Today's Weather



Sunny

**Monday, Apr 21**

Max 32° | Min 26°

Rain: 0

Humidity: 70

Wind: normal

Sunrise: 05:53

Sunset: 06:22

Barometer: 1010

Tomorrow's Forecast



Partly Cloudy

**Tuesday, Apr 22**

Max 35° | Min 26°

Extended Forecast for a week

Wednesday  
**Apr 23**



35° | 26°

Partly Cloudy

Thursday  
**Apr 24**



30° | 27°

Cloudy

Friday  
**Apr 25**



31° | 27°

Cloudy

Saturday  
**Apr 26**



32° | 27°

Overcast

Sunday  
**Apr 27**



31° | 28°

Overcast

**THE TIMES OF INDIA**

## Plants that regulate sprouting tackle climate change well

*Plants with the ability to regulate the timing of germination in response to environmental cues are more likely to spin off new species and are better at dealing with weather threats from climate change.*

LONDON: Plants with the ability to regulate the timing of germination in response to environmental cues are more likely to spin off new species and are better at dealing with weather threats from climate change.

Plants whose seeds put off sprouting until conditions are more certain give rise to more species, a study said.

Plants whose seeds have since lost the ability may be prone to extinction under future climate change, especially if the timing of sprouting is no longer in tune with their environment, said Rafael Rubio de Casas from Universidad of Granada in Spain.

Seed dormancy may help plants colonise new environments by preventing new arrivals from sprouting under conditions or at times of year when the probability of seedling survival is low, said the study.

For the study, the researchers analysed seed dormancy data for more than 14,000 species of trees, shrubs, vines and herbs from across the globe.

"Having the capacity to fine-tune their development to the environment seems to be crucial for diversification," de Casas noted.

The results suggest that even the earliest seeds had this ability, said the study that appeared in the journal *New Phytologist*.

## Onion farmers shift to tapioca farming to evade water scarcity

---

PERAMABALUR: Perambalur district is seeing a major shift in cropping patterns as prolonged water scarcity has forced farmers to try alternative crops. Till around two years ago, Perambalur district accounted for a major share of onion supply to the Tamil Nadu market. This is likely to change as onion farmers have adopted easy-to-raise crops, with tapioca being the main preference of farmers. However, farmers are uncertain about a decent harvest as it is difficult to find enough water for the new crop.

Onion farmers were able to get returns in 90 days, though they had to take care of the crop during this period. Onion cultivation requires a good supply of water, though the extremes of heavy rain and scorching sun are not conducive for the crop. Perambalur district depends on direct irrigation or well irrigation. Now, several onion farmers have shifted to cultivation of tapioca to counter dry conditions. They admitted that their livelihood has been affected for the past two years due to monsoon failure.

V Neelakantan, district secretary of Tamilaga Vivasayigal Sangam, said the failure of north-east monsoon last October and November put paid to onion farmers' hopes. "Around 8,000 acres were under onion cultivation two years ago in Perambalur district. Now, onion is cultivated only in 500 acres in the district. Monsoon failure and depletion of ground water have to be blamed for this. We have no other option other than switching to tapioca cultivation," said Neelakantan.

Tapioca, which is a 10-month crop, requires watering only once in 15 days. But that too is difficult for farmers in Perambalur as the wells here are dry due to plunging level of ground water. Some farmers adopted drip irrigation system to irrigate tapioca farms. Now, it is two months since the crop was cultivated in around 7,500 acres in Perambalur district. But, they doubt if they can harvest a good crop.



N Senthilkumar, a farmer in Perambalur district, said as dry land absorbs water quickly permeation takes a long time. "The current situation is not feasible for tapioca cultivation. It takes 30 days to flow water in one acre as the land is dry already. We manage to water the plants once in 40 days. We are not sure if the crop will grow well," lamented Senthil Kumar.

Price volatility is another problem haunting tapioca farmers. "Middlemen play a major role in fixing tapioca price. In January we got Rs 800 per bag (80 kg) of tapioca. But later the price came down. The price of our produce will depend on market condition," said Senthilkumar.

Tapioca is mainly used in the making of sago and some food products.

## Budding agro experts want to empower farmers

---

BANGALORE: When the girl from Srirangapatna walked to the dais at the 48th annual convocation of the University of Agricultural Sciences (UAS) on Sunday, it was with a dual purpose. One, to receive four gold medals, the fruit of her hard academic work, and the other to announce her mission on preventing rural youth from migrating to urban areas.

Mamthalakshmi, daughter of a small businessman, has no dreams of getting into a high-paying job in agro-based research companies, for her goal is set: help farmers reeling under a shortage of good hands. "I'm from a rural place like Srirangapatna, only people like me can understand the difficulties faced by farmers. Only 20% of farmers are using the latest technology, the remaining are unaware about its usage," she said.

Mamthalakshmi, who's working as assistant professor with UAS, added that her aim was to visit villages across the state to educate farmers about technology, which would help them enhance crop production.

At the convocation, there were many graduates like Mamthalakshmi who bagged gold medals in various undergraduate, postgraduate and PhD courses, who expressed their zeal to work for the welfare and development of farmers. They were youngsters from rural regions with a basic grounding in farming, who came to cities to pursue higher education. All of them were convinced that farmers need the help their education can give.

UAS conferred 129 gold medals on 50 degree holders. While many graduates were celebrating their degree certificates, three girls -- Akshatha H, who completed her UG course in UAS, Mandya, Asha IS, from Shimoga, and Lepakshi NM, a native of Tumkur, who received nine gold medals each -- were discussing their plans about empowering youths in rural areas.

The three girls said the major problem today is that youths from rural areas are attracted to urbanization and move to cities for their livelihood. "If this trend continues, there will be a scarcity of crops. Our venture is to make youths take up farming as their livelihood," they said.

Aditya KS, who was conferred seven gold medals for his performance in MSc in Agricultural Sciences, is ambitious about becoming a scientist. His mantra is to help farmers with research for solutions to various agricultural problems.

Aditya's father Srinivas Rao, a cook at a temple in Shimoga, said, "I cannot tell you how proud I am today. It would have been difficult for us to afford my son's academic expenses.

But he managed to complete his UG and PG courses on various scholarships."

### 'Address nutrition needs'

Renowned agricultural scientist MS Swaminathan, in his convocation address, said the new government at the Centre must focus on establishing a National Biotechnology and Biosafety Regulatory Authority. "There are numerous genetically modified organism varieties in the field and they should be tested without further delay. This will help finalize such varieties through appropriate legislation," he said.

The Food Security Bill should become the Nutrition Security Bill, he said. "There is an urgent need to increase crop production of pulses. The year 2016 has been designated as the International Year of Pulses and we should begin steps now to intensify cultivation. This will not only improve soil fertility but also help alleviate protein hunger. The country produces 270 million tonne of food and vegetables and 140 million tonne of milk. But there are many who suffer from malnutrition, which is leading to birth of underweight babies. There is no time to relax on the food production front."

Swaminathan pointed out that there's a need for bigger investment for research in agriculture, and funds available now are insufficient. "Agriculture technology and engineering should be used as a tool to attract youngsters towards the agricultural sector. The future belongs to greens and not to guns."

Growing lives: The University of Agriculture convocation saw students aiming to address needs of farmers with state-of-the-art equipment.

## THE HINDU Business Line

### Caught in the GM maze

---



Hybrid seeds may drive Monsanto India's momentum, even as the commercial launch of GM maize may be delayed by politics. The stock of Monsanto India, the Indian subsidiary of crop protection major Monsanto US, has been the best performer in the agri space, almost trebling in the last one year. Healthy fundamentals, coupled with a favourable policy stance by the Government allowing field trials for Monsanto's genetically modified (GM) maize (corn) variety, helped

the impressive rally in the stock.

Though the decision by the Genetic Engineering Approval Committee (GEAC) to allow field trials in the company's transgenic maize is positive, Monsanto will have to secure permission from the respective State Governments to actually commence trials. Barring Punjab, Chhattisgarh and Maharashtra, all other States are either undecided or have expressed objection to the trials. Even if the company commences trials in these three States, commercial launch is subject to successful completion of trials, validation of data and approval by the GEAC — a long process. Hence, benefits may not accrue to Monsanto in the near term.

Increasing demand for hybrid maize seeds and rising maize acreage should help Monsanto sustain growth momentum in its existing hybrid maize and weedicide business.

But given the strong rally over the last year, near-term upsides may be capped. At Rs. 1,536, the stock trades at nearly 18 times its estimated 2014-15 earnings. While existing investors can continue to hold the stock, fresh exposures can be avoided.

### **Key products**

Hybrid maize seed varieties sold under the flagship Dekalb brand, and weed management herbicide glyphosate brand, Roundup, are the two key products sold by Monsanto India. The company sells almost 14 varieties of the Dekalb maize hybrid which are customised to suit the country's diverse agronomic and environmental requirements. Dekalb is the leader in the hybrid maize seed segment with over 24 per cent market share.

Dekalb accounts for two-thirds of its overall revenue, while the herbicide Roundup accounts for the balance. Above-normal rainfall, robust market price for maize and healthy increase in maize acreage across key-producing states led to strong demand for Dekalb in 2013. The crop acreage in Bihar and Rajasthan rose over 20 per cent during the rabi season. Dekalb grabbed a large pie of the incremental demand while its peers lost out due to seed shortage.

Hybrid seeds currently account for 63 per cent of the total maize seed market, which translates into significant growth potential for Monsanto. That said, the company's prospects in 2014-15 will remain contingent on the monsoon and maize acreage.

### **A Round-up**

Monsanto Mahyco Biotech (MMB) is an equal joint venture between Monsanto Holdings (owned 100 per cent by parent Monsanto Company, US) and Mahyco. MMB is currently working on the next generation cotton technology known as Bollgard II Roundup Ready Flex. This technology aims to protect the cotton plant from bollworms and also provide tolerance to the glyphosate herbicide Roundup for effective weed control. The crop is undergoing Biosafety Research Level II trials, and the GEAC has to give its nod.

An approval, when it comes, will benefit mainly the MMB joint venture that owns the technology. However, with this technology providing tolerance to glyphosate herbicide, a go-ahead should also boost the demand for Monsanto India's Roundup. The company's standalone revenue grew 36 per cent to Rs. 507 crore during the first nine months of the fiscal, led by healthy Dekalb sales. A better sales mix, coupled with tighter control over costs, helped Monsanto more than double its operating profit to Rs. 143 crore during this period. Net profit also doubled to Rs. 129 crore.

## Agri-science varsity to tap milk producers' cooperatives

---

Mulls developing an effective, sustainable model for dissemination of farm advisory



**Bangalore, April 20:** University of Agricultural Sciences, Bangalore (UAS-B), plans to utilise the milk producers' cooperative society network (MPCS) to develop an effective and sustainable model for dissemination of farm advisory to farmers.

According to the university's initiative, it plans to tap the MPCS network already present in Karnataka. Currently there are 12,000 MPCS in the State, spread across 30,000 villages. In the country there are about 1 lakh milk producers' cooperatives.

K Narayana Gowda, Vice-Chancellor, UAS-B, said:

“The new initiative developed by us will effectively involve MPCs at village level as farmers visit MPCs twice daily to deposit milk they produce.” “We have developed a model to tap MPCs infrastructure readily available for extension services of Krishi Vigyan Kendras. Further, services of MPCs will also be utilised to generate accurate local information database needed for customised extension service to farmers,” he added. A sum of Rs. 5 crore has been sanctioned to initially implement the project in Bangalore Rural and Chickballapur districts involving 500 MPCs in the State.

#### **Extension services**

MB Raje Gowda, Registrar, UAS-B, said, the University through its extension services so far trained 21,086 farmers, 4,380 extension personnel, and has organised 494 different field level demonstrations. “This year we have recommended five technologies in crop production, four in crop protection, two in weed control and three other technologies for inclusion in package of practises,” he added.

#### **New varieties**

UAS-B has released new varieties of groundnut and pigeonpea. “The new variety UAS-B Groundnut is called KCG-6. It is a Spanish bunch with medium duration of 108-112 days with average pod yield potential of 20 quintals per hectare,” said Gowda.

“KCG-6 has kernel yield of 15 quintal a hectare and oil yield of 735 kg a hectare registering 38 per cent increased yield over the TMV-2 (which yields 15 quintal a hectare) and high oil content of 49 per cent,” he added.

The variety has tolerance to late leaf spot and rust disease. The university has recommended this groundnut variety for cultivation under rainfed as well as irrigated conditions.

The new Pigeonpea variety is a fusarium wilt resistant with duration of 165-170 days. This variety, according to Narayana Gowda, has an average yield potential of 25 quintal a hectare under field conditions. This has been recommended for cultivation in Zone 5 and is suitable for both rainfed and irrigated conditions.

## **Business Standard**

### **Dependence on imported edible oil to hit new high**

---



Despite the increase in [oilseed](#) output, India's dependence on imported [edible oil](#) is set to hit a record high this year. The increasing direct consumption of oilseeds, including soybean, mustard seed and groundnut, has reduced their supplies available for crushing.

This oil year (October 2013-November 2014), the share of [imports](#) to overall edible oil consumption is likely to hit 65.3 per cent, against 61.2 per cent in the previous year, data compiled by the US Department of Agriculture show. India's overall edible oil import is likely to stand at 11.8 million tonnes (mt) this year, against 10.7 mt in the previous year. The edible oil import bill may exceed the benchmark Rs 60,000-crore mark; last year, it stood at Rs 57,500 crore.

“Every year, fresh addition to India's existing edible oil consumption stands at 0.8-0.9 mt because of an increase in the population and lifestyle changes. However, at seven-eight mt, edible oil production from domestic sources has remained stagnant for the past few years. As such, dependence on imports will continue until production from domestic sources is

stepped up," said B V Mehta, executive director, Solvent Extractors' Association.

According to an India Ratings report, total edible oil production from domestic sources for 2013-14 is likely to stand at 7.6 mt, a marginal rise compared to last year's 7.5 mt.

For the November 2013-March 2014 period, overall edible oil import fell six per cent to 4.3 mt from 4.6 mt in the year-ago period. "As the crushing of last year's kharif oilseeds was underway in full swing, imports were suppressed. With the lean seed-crushing season, import will move up," said Pradeep Chowdhry, managing director of Gemini Edibles & Fats India, a Hyderabad-based subsidiary of Ruchi Soya Industries.

## SLIPPERY GROUND

Edible oil demand/supply dynamics (in mn tonnes)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14*
Oilseed production	32.9	35.7	36.3	36.8	38
Oilseed crushed	25.1	29.1	28.9	29.2	29.4
Edible oil production	7.8	8.5	8.1	7.5	7.6
Imports	9.2	8.7	10.1	10.7	11.8
<b>Total supplies</b>	<b>17</b>	<b>17.2</b>	<b>18.2</b>	<b>18.1</b>	<b>19.4</b>
<b>Import share (%)</b>	<b>60.8</b>	<b>55.2</b>	<b>60.5</b>	<b>61.2</b>	<b>65.3</b>

\* Estimates

Source : USDA and India Ratings

Sustained lower prices have increased per capita consumption of edible oils, especially for rural consumers (who buy oil based on the money available, not according to weight). Per capita consumption is increasing two-three per cent every year. According to Dorab Mistry, director of Godrej

International, India's per capita edible oil consumption would rise to 14.43 kg in 2013-14 from 13.92 kg the previous year.

The financials of edible oil companies are likely to improve in the coming quarters, owing to higher revenue growth on account of increased high sea sales and refinery sales. With an increase in the proportion of the higher-margin refinery sales to overall sales, the profitability and margins of companies are likely to improve significantly in 2014-15 compared to the levels seen in 2013-14 and 2012-13, India Ratings forecasts. The agency expects fully integrated refiners with wider product portfolios to benefit more than those with limited product diversification. Companies whose portfolios include branded products will see additional gains.

---