11-05-2015



Haryana to start liquid waste management system in villages

A new system for liquid waste management would soon begin in villages of Haryana, state Agriculture and Irrigation Minister Om Prakash Dhankar said here on Sunday.

"For this system, three tanks would be set up in a village pond for purifying water and this could be used for irrigation purposes," he said.

The scheme would first be implemented in 1,200 villages of Haryana and the State government would implement real-time mapping system for equitable distribution of canal water and for its monitoring, Mr. Dhankar said.

This would help in getting online information on internet such as flow of total quantity of water in a canal at a particular time, he said.

The priority of the State government is that water should reach every field or farm, he said.

The state government has supplied water till the tail end in 75 per cent of all the canals and the farmers would be provided with necessary equipment for sprinkler and drip irrigation system, Mr. Dhankar said.

Besides, canal water would be supplied to 1,000 village ponds by laying pipes, he said.

Mr. Dhankar said that a programme would be organised at Panchkula for exservicemen where they would be imparted training for advanced farming of fruits and vegetables.

He said that this way other farmers of their village would also be inspired to adopt progressive farming.

The State government also has a plan to open one excellence centre for horticulture or agriculture in each district, he said.

A board would be installed in villages carrying information about freedom fighters, martyrs, wrestlers, players and successful person of the village to inspire the youth, he said.

The Irrigation Minister said that gram sachivalayas that are being set up in villages would provide a number of services to villagers at one place.

He said that the state government is also taking efforts to set up a community centre in gram sachivalaya so that community programmes could be organised there.

Mr. Dhankar said that the present government has given compensation up to Rs. 12,000 per acre for loss of crops which is higher than the recommendations of Swaminathan Ayog.

Every grain of the crop has been purchased at Minimum Support Price of Rs. 1,450 per quintal during the current rabi season, he said. – PTI

2.50 lakh tonnes of samba procured in Nagapattinam



The Tamil Nadu Civil Supplies Corporation district has procured 2.50 lakh tonnes of paddy during the 'samba' season and has made arrangements for procuring the 'thalady' variety too.

A large number of paddy bags are being stocked under the cap storage system at 16 places across the district for onward transit to modern rice mills in the other regions, particularly Tiruchi and Chennai, an official source told *The Hindu* on Sunday.

The cap storage system has helped stock paddy without it getting affected by rain. About one lakh tonnes of paddy had been stocked at 15 centres – nine in Mayiladuthurai division and six in Nagapattinam division – including Sattaiyakudi, Manalmedu, Thalachankadu, Gunathalapadi, besides Nagapattinam.

"With 'samba' harvest coming to an end, the Tamil Nadu Civil Supplies Corporation has now made arrangements for procuring 'thaladi' crop," according to a source. The Tamil Nadu Civil Supplies Corporation has taken up construction of a godown at an estimate of Rs. 175 crore at Kovilpathu. The storage capacity of the godown would be one lakh tonnes.

Further, steps were being taken for the construction of another 50,000-tonnee capacity godown at Erukkoor village under the National Bank for Agriculture and Rural Development (NABARD)-funded project. This godown would be of silo model, the source added.

Growing your own food at home



The book from Auroville promises to teach you all about urban food farming

: It is therapeutic and a great conversation starter. As Indian cities wake up to the idea of the aroma of mint and tulsi grown fresh at home, a book from Auroville promises to teach you all the know-how of urban food farming, whether you have a spare terrace or just a windowsill.

'My Pumpkin Roof: How to grow your own urban food garden' published by Auroville Consulting and Earthcare Books is a collaborative effort by Nafeesa Usman, Urvashi Devidayal, Malvika Pathak and Martin Scherfler. It came about in the wake of using Auroville as a learning ground for urban food farming.

Urban food farming is a growing movement in North America and Europe, says Mr. Scherfler of Auroville Consulting. It has developed into what is termed as 'productive landscaping' as more areas are tapped for producing food.

"Food has a fundamental connection with us. It is something we put into our bodies. Through urban farming, there is some kind of food sovereignty," says Mr. Scherfler. Food sovereignty is the knowledge and control of where the food has come from, and what has been used in production. This means you can be assured that the vegetables you have grown are chemical-free and fresh.

Urban farming can also revive vegetable biodiversity, says Mr. Scherfler. Industrialised production requires batches of a vegetable to be of the same size, shape and variety, while one is free to experiment in their garden.

Unlike traditional farmers who are dependent on their produce for their livelihood, urban farmers can afford to learn through mistakes.

Good for environment

With industrialised production of food, and the setting up of the sewerage system, there was a disruption in the natural cycle of producing and consuming food as well as nutrient supply to agriculture.

"Earlier, food production was integrated into each town. Urban farming encourages one to use biodegradable waste as fertiliser, thus reducing its flow into landfills. In fact, biodegradable waste makes up 70 percent of landfills," says Mr. Scherfler. Urban farming also means reduced food waste during transportation.

Not competition

Urban food farming must be seen as being complementary to traditional farming, says Mr. Scherfler. Inputs including seeds and grains come from farmlands. Urban farming also has restrictions on what can be grown. "After all, you cannot grow a mango tree on your roof. Traditional farming or urban farming alone cannot feed. Thus it will be a collaborative process of food production," he says. In a positive, it will also make people respect and appreciate the hard work put in by farmers, he adds.

The government can step in the role of supplier of equipment, soil and other inputs to encourage more people to take up urban farming, he says. Puducherry has potential to grow in urban farming, thanks to a large number of flat roofs.

Auroville Consulting is also planning a 9-day programme in June for high school children, 'Camp Auroville', where the participants will design and implement a small urban farm.

"After all, you cannot grow a mango tree on your roof. Traditional farming or urban farming alone cannot feed. Thus it will be a collaborative process of food production."

Seeds of hope



G. Mullaivanam, founder, Tree Bank, can identify tree species, the month, year and the occasion they were planted for. The bank, which provides free saplings in the city every day, has planted more than 90 lakh saplings. "Our job does not end with distributing free saplings. We also give tips about nurturing and protecting them," Mullaivanam, says.

On his birthday, Mullaivanam and volunteers of Tree Bank planted around 1 lakh saplings across the city including Marina Beach, Elliot's Beach, and Chennai Central. He is on a mission to plant one lakh saplings in Chennai, Kancheepuram and Tiruvallur.

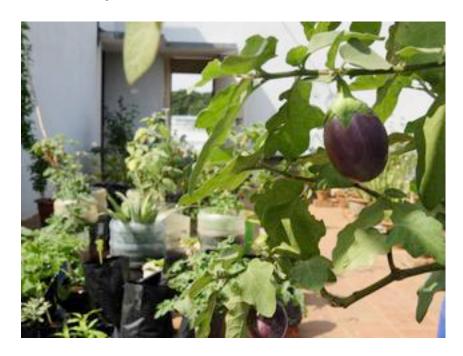
"I have planted more than 3,000 saplings on Bangalore High Road, Grand Southern Trunk Road and at Poonamallee.

Getting permission from the authorities concerned is not an easy task. We have to wait for nearly six months to get the nod to plant saplings along roadsides," he says. He sources the seeds from Vandalur Zoo and Nanmangalam Reserve Forest.

"The declining green cover in the city is a matter of concern. It is mainly due to rise in population, real estate and the sale of agricultural lands. But, steps are not taken by the authorities concerned to plant a sapling for every tree that is felled. Every one should take steps to plant trees, protect the environment and increase the green cover in the city," he added.

On the areas that have better green cover in the city, he names Besant Avenue Road, K.K. Nagar, Anna Nagar, T.T.K. Road, Kilpauk Water Tank Road, Besant Nagar and Gandhi Nagar.

Learn how to make your terrace beautiful



A one-day training programme on roof gardening is being conducted by the Tamil Nadu Agricultural University Information and Training Centre on May 12 at No.U-30, 10th Street, (Behind Jayagopal Garodia School), Anna Nagar from 9.30 a.m. to 4.30 p.m.

For details, call 2626 3484.

The joys of going solar

Several farmers in Tiruvallur and Kancheepuram districts have been using both solar power and water very efficiently – thanks to their water pumps that are powered by the sun.

This is part of an initiative by the agricultural department.

"We have been provided the equipment on the condition that we use only drip irrigation so that not even a drop of water is wasted. Using solar power, we draw water from the bore well and fill up the rocky well and then water the fields at night," said S. Krishnamurthy, a farmer of Walajahbad, who is currently growing watermelons, papaya, chillies and onions on his land.

The solar powered-pumps have been installed with 50 per cent funding from the National Agriculture Development Programme, 30 per cent from Ministry of New and Renewable Energy and 20 per cent from the respective farmers.

The entire cost, including for digging the borewell, is being covered by the project, explained a source in the Agriculture Department.

Farmers say they are happy that they opted for the solar panels since getting a power connection in remote areas takes a lot of time. "It has been over a year since I applied for an electricity connection," said a farmer.

Power to pump water

G. Chandrasekar, who has a farm in Nochili village near Thervoykandigai in Tiruvallur district, said that there is enough power to pump 15,000 litres of water per hour to water his fruit-bearing trees.

"Since the solar panels have automatic tracking facility due to which the panels automatically turn towards the sun, we don't have to turn the panels manually every 2-3 hours. Many more farmers in our village want solar powered pumps," he said.

J&K to set up pesticides regularity authority



The Jammu and Kashmir government has decided to constitute a State Pesticides Regularity Authority to curb the use of spurious pesticides which cause harm to fruit production and its quality.

The decision was taken at a high-level meeting of Horticulture and allied Departments held under the chairmanship of Minister for Horticulture Abdul Rehman Veeri here on Friday, an official spokesman said.

In this regard, the Minister directed for constitution of a core committee for formulation of guidelines of the Authority with the advice of Law Department.

Sharing concerns over alleged sale of spurious pesticides, Mr. Veeri said the government would enact stringent laws to check this menace to safeguard horticulture industry from further damage.

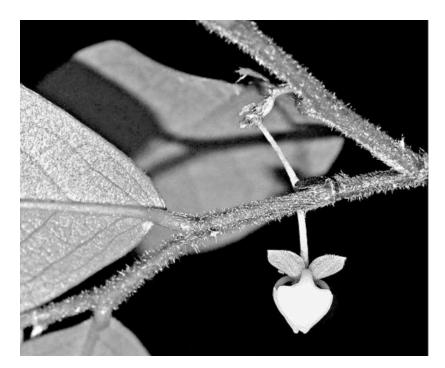
He directed both agriculture universities of the State to prescribe scientifically proven standard pesticides and fungicides to the fruit growers and farmers well in advance of the spray season so that they are not fleeced by unscrupulous pesticide traders.

"Horticulture is the mainstay of the State's economy and all efforts should be made to promote this sector," Mr. Veeri said.

In a competitive era, quality control is must and we have to focus on this vital area to maintain the credibility of state's horticulture produce, he added.

The Minister said horticulture industry had given sustenance to the people of the State in most difficult times and nobody would be allowed to destroy this vital sector of the State's economy.

Two rare tree species discovered



A group of scientists and researchers have discovered two species of little-known plants, which are endemic and possibly threatened, in the lush forests of the Western Ghats in the State.

Orophea malabarica and Orophea sivarajanii, which are related to the custard apple family, were discovered in Makutta Ghat of Kodagu district by a team from the Herbarium, Centre for Ecological Sciences, Indian Institute of Science, and Lead Botanical Garden, University of Agricultural Sciences, Bengaluru.

The discovery of the two species that were thriving in a small patch in the ghats was reported recently in the *Journal of Threatened Taxa*. Out of the 12 species of Orophea in India, five are found in the Western Ghats.

While the two plants have been found sparingly in Kerala's Thrissur district (Orophea malabarica) and Wayanad district (Orophea sivarajanii), the

discovery is the first in Karnataka and has allowed the team to carry out a detailed analysis on the distribution and status of the species.

"Based on the data collected from our field explorations and previous reports, the suggested status of Orophea sivarajanii is endangered (as defined by the International Union for Conservation of Nature)," says Navendu Page, a researcher part of the team led by K. Sankararao.

'Take steps to extend crop loans to farmers'

The Karnataka Pranta Raita Sangha (KPRS) has demanded that the State government ensure that all the farmers got crop loans from nationalised and cooperative banks to avoid them falling into a debt trap after taking loans from private money lenders at exorbitant interest rates.

KPRS activists led by State president Maruti Manpade staged a dharna outside the office of the Deputy Commissioner in Kalaburagi demanding that the State government pressure the Union government to direct banks to adhere to the policies and principles to achieve universal coverage of crop loans.

Mr. Manpade, in a memorandum addressed to Chief Minister Siddaramaiah and submitted to the district authorities said that not even 40 per cent of the farmers were not getting crop loans from banks and the remaining were dependent on money lenders for meeting their financial requirement for cultivation.

Overdraft facilities

He said that the government should also extend overdraft facilities to farmers as it was being done to businessmen to meet emergency expenditure.

Organic products getting popular

Heightened concerns about the high levels of pesticides and chemicals in food articles are pushing many to look out for organic products in the city.

The increasing number of customers at Organic Bazar, an outlet located in Jawahar Nagar in Thiruvananthapuram that promises quality organic products, is proof enough of this increasing demand for authentic organic products.

When set up in 2003, 'Organic Bazar' functioned by providing a few local residents with vegetables collected from the kitchen gardens they promoted, in what was essentially a small monthly affair.

The establishment has come a long way since then, currently sourcing groceries and other home care products from all over the country having Participatory Guarantee Systems (PGS) and Thanal International Certification Services (ICS) endorsement

It has now grown into a full-fledged shop open from 11 a.m. to 7.30 p.m. on all days except Sundays, generating an average income of Rs. 7 to 8 lakh monthly and has been made a private organisation of its own, independent from Thanal, the founding organisation.

By expanding their product range along the years, making available nutritious brown rice to organic ragi based baby food substitutes, they have carved out a niche market.

Organic produces are in demand as they are believed to be free of pesticides and chemicals.

Organic farmers make use of trap crops instead of pesticides that lure the pests away from the main crop leaving them uninfected. Eco-friendly liquid fertilizers and the method of multiple cropping employed increases crop yield and facilitates the production of a variety of crops at the same time.

New outlet

Given the increasing demand for its products, Thanal is planning a new outlet. "Currently we are working on providing technical support to new growers who are mostly IT professionals or retired government employees," says R. Deepak, programme officer, Thanal.



Wholesome and Healthy

For the past few years, Middle-eastern cuisine's global profile has been on the rise. And of these, Lebanese food takes the top spot for its wholesome yet healthy offerings. Today, many fine-dining restaurants in India offer hummus and mezze platters as appetisers. Similarly, tabbouleh salad, a mainstay of Lebanese cooking, is celebrated on menus across the world. "Though this salad is a simple mixture of bulgur (broken wheat), tomatoes and parsley, it is traditionally an important dish, included on the menu for special occasions," says Syria-born chef Maher Omran.



Based in Dubai, Omran is currently in the city for a 10-day Lebanese food festival. Though the reason for tabbouleh's popularity is unknown, the chef says it defines the cuisine — local and healthy — and will be part of the menu during the festival. The menu also features moussaka, an eggplant-based baked dish, and yakhni, a stew made with Egyptian rice and chicken broth. "The Egyptian variety is like Sushi rice in size but not as sticky. We add vermicelli and flavour it with butter," says Omran, who will use recipes handed down by his mother.

Growing up in Syria, Omran's training began in his mother's kitchen where he learned to make traditional dishes such as baba ganoush, kibbeh kebab and tavuk davutpasa (meatballs cooked in thick tomato gravy). "I give these recipes a modern spin. I stuff these meatballs with halloumi (cheese) and then cook them in tomato sauce," he adds.

The dishes are being contemporised but the cuisine still holds on to its roots in other ways. While kitchens across the globe may obsess over dishes that are presented aesthetically, or as way Omran puts it, "big plates and tiny portions", Lebanese people love their large braised lambs and meaty main

courses. "Our appetisers are predominantly vegetarian because we like to prepare the stomach to attack the meats," says Omran.



Himachal emerging as off-season vegetable hub



Production of <u>off-season vegetables</u> in Himachal Pradesh — whose economy is largely dependant on <u>agriculture and horticulture</u> — is coming up in a big way with the annual output crossing 14 lakh tonnes, an official said on Sunday.

The production of off-season vegetables has gone up considerably, ensuring a total annual income of Rs.2,500 crore to the farmers in the sector, a government spokesperson said.

He said a provision of Rs.60 crore has been made in Himachal's budget in this fiscal for promoting off-season crops, especially vegetables.

Fishing for solutions to combat malnutrition stalking tribespeople

The fisheries department is planning a novel move to tackle the malnutrition problem ailing tribal colonies in Wayanad.

The department plans to convert all water bodies near tribal colonies in the district into fish ponds with nutrient-rich fish varieties to help vulnerable households meet basic nutritional requirements.

As many as 324 public and private ponds within tribal colonies in 25 panchayats in the district have already been stocked with over two lakh fingerlings of rohu, catla and grass carp varieties.

Officials hope that fish — high in protein, calcium, vitamins and iron — would provide the tribespeople with some much-needed nutrition.

"We decided to tap the potential of aquaculture to address the issue of malnutrition among the tribespeople, especially in the backdrop of rising infant deaths in areas like Attapadi. The pilot project has been a huge success in Wayanad with many tribal colonies reaping their first fish harvest. The project can be rolled out across the state in collaboration with the tribal department," Sudhir Krishnan, assistant director, department of fisheries, said.

Besides undertaking preparatory works and depositing fish seeds in community ponds and private lands free of cost, the department has also trained the tribal community in rearing fish with an aquaculture coordinator in each of the 25 panchayats under the Matsya Samrithi scheme.

"We have also submitted a proposal to the district authorities to include fish at least once a week in the mid-day meal scheme in schools with substantial tribal population," Priya T D, project assistant at Wayanad fisheries department said.

She added that rearing fish will also provide them a means of income. "We have tribal farmers who reaped 73kg fish from just 10 cents in their maiden harvest. Though fish varieties are ready for harvest in eight months, many tribal groups have also gone for partial harvest and sharing among their households when required," she said.

The various surveys by the National Nutrition Monitoring Bureau (NNMB) report had showed that tribal communities in the country were nutritionally worse off than their rural counterparts. The second repeat survey report on Diet and Nutritional Status of Tribal Population, 2009, had showed that only 29-32% of tribal children consumed a diet with enough protein and energy. The proportion of tribespeople in different age groups consuming less than 70% of protein and energy than is required was observed to be higher compared to their rural counterparts.

Monsoon expected on time, may hit Kerala on June 1



Monsoon is expected to arrive on time this year, hitting Kerala on June 1, but rainfall may remain below normal, prompting the government to put in place a contingency plan and push crop insurance for farmers.

The contingency plan would cover as many as 580 districts that may witness monsoon deficit, while the agriculture ministry is also mulling over steps to popularize crop insurance schemes among the farming community.

"The onset of monsoon looks normal. An error window of 2-3 days can be taken. As of now, there is no delay in arrival of rain. However, monsoon is expected to be below normal due to El Nino factor," a senior IMD official told PTI.

The timely onset of south-west monsoon is crucial for sowing of kharif (summer) crops like paddy and a deficit in rainfall may hit the rice output.

Last year, the country had received 12 per cent less rain, which hit production of grains, cotton and oilseeds. After a poor monsoon in 2014, the untimely rain during March-April this year have already put farmers in distress and there have been quite a few cases of farmer suicides.

Preparing for below-average rain, the agriculture ministry is working hard to minimize the impact of weak monsoon on kharif production especially rice and food inflation.

"The state governments have been asked to fully gear up to implement the contingency plan in 580 districts. In some districts, we are updating

contingency measures as per the local needs," agriculture Secretary Siraj Husain said.

He further said a big push would be given to popularize crop insurance scheme among the farming community.

The Indian Meteorological Department (IMD), which has earlier forecast below-average monsoon in 2015, is scheduled to announce on May 15 the likely date of monsoon onset and its progress thereafter.

Private weather forecaster Skymet will also release its update on monsoon around the same time.

"We are projecting normal monsoon, which is expected to land on time around June 1 with 2-3 days of error window," Skymet CEO Jatin Singh said.

As per IMD also, the normal date for monsoon onset on the southern coast is June 1.

Agriculture, which contributes only 15 per cent to India's Gross Domestic Product (GDP) but employs about 60 per cent of population, is heavily dependent on monsoon as only 40 per cent of the cultivable area is under irrigation.

Farmer family's brinjal preservation is a national feat

Bagalkot's brinjal woman, Laxmibai Zulapi, 77, has drawn the attention of President Pranab Mukherjee for her work in conserving an indigenous breed of brinjal for the past four decades.

This rustic woman from Hulyal village of Jamakhandi taluk in Bagalkot district has taken up preservation of this shiny, purple-black vegetable - unimaginatively called HZKB-1 -- she once found on a hillside, as her mission. For this, she's been honoured with the consolation biennial award of National Innovation Foundation (NIF), an autonomous body of the Union government's department of science and technology, recently. She also got a patent for the breed she developed.

Laxmibai told STOI the President was impressed by this brinjal at the awards ceremony recently in New Delhi.

She and the 'Kari Badane' (black brinjal) go back 40 years, when she found two brinjals. "Those brinjals were black and shiny compared to the others. I picked them out of curiosity and started conserving them. I cultivated the seeds for one year and grew them every year. After two years, my family members decided to sow them on one acre of land. As the fruits were big and bright, people from the surrounding villages started buying our brinjals," she said.

Asked about documentation of this rare breed, Laxmibai's son Rudrappa Zulapi, 44, said he had read in a Kannada publication that the state was home to just 12 indigenous breeds of brinjal. "Then I visited the University of Agricultural Sciences (UAS) in Dharwad, where experts studied our vegetables. I learnt that NIF supports grassroots farmers. I wrote to the NIF

head office in Ahmedabad four years ago. A team of experts arrived and took photographs and videos of the crop in our fields. They also gave the University of Horticultural Sciences in Bagalkot a sum of Rs 90,000 to prepare a detailed report on the brinjal variety and comparison with other breeds," he explained.

Rudrappa, an organic farmer since 1995, grows brinjals on two acres. "For one acre, we use 250gm of seeds. We provide seeds free to domestic growers and charge Rs 500 per 10gm for commercial growers," he said. He affirmed that his income from the brinjal crop on 2-5 acres is Rs 2.5 lakh per annum. There is a vast demand for this variety, particularly during functions and weddings.

HD Babalad, professor of agronomy in UAS, Dharwad, said this agricultural family has taken all measures to avoid cross-breeding by adopting a mixed crop system. "As a result of their efforts, HZKB-1 breed has imbibed good resistance to possible cross-breeding. They use neem kadha to avoid crop disease," he said.

BusinessLine

Global farm product prices turn consumer-friendly on benign weather

Even as prices of oilseeds and pulses have rallied in the domestic market in recent weeks following unseasonal rains and occasional hailstorms during March and early April that damaged part of the Rabi harvest, the picture is different at the global level.

Worldwide, agricultural commodity prices have remained largely stable in April and the production outlook for the coming months is positive.

Indeed, prices of staple grain such as wheat and animal feed such as corn and soyameal actually fell by about 3 per cent month-on-month while vegetable oils and sugar remained largely unchanged.

Grain prices

Barring India, weather at major origins has stabilised and turned benign.

Dry weather in the US Midwest has encouraged accelerated corn plantings and raised expectations of good yields.

At the same time, showers in the southern plains have improved the outlook for the US wheat. Eastern Australia too has experienced precipitation.

Grain prices continue to be under pressure not only from prospect of another large harvest in the northern hemisphere, but also rising expectation that Russia would sooner rather than later remove the export duty. In the event, supplies would increase further.

No wonder, speculators have turned bearish on grains. This is evidenced by the record number of short positions held by non-commercials on the bourses.

Brazilian connect

Simultaneously, good weather in Brazil in recent months has created a positive outlook for sugar and coffee production.

Cane harvest in Brazil – the world's largest producer and exporter of sugar – has already started and crushing is gathering pace. With India and Thailand holding large stocks, sugar supplies for the coming several months look secure.

Simply put, there is hardly any bullish factor on the horizon that can trigger a sugar price rally.

Palm oil under pressure

As for vegetable oils, the demand is sluggish even as availability is abundant and prices are decidedly consumer-friendly. In Brazil and Argentina, soyabean availability is at record levels.

However, logistics problems in Brazil and port strike in Argentina have slowed down the pace of shipments.

Palm oil production is up month-on-month in April as the market has entered the peak production season which will last till October.

Prices have declined by over 5 per cent in recent weeks and crude palm oil is currently offered at \$615 a tonne from Indonesia.

Going forward, palm oil market is expected to be under pressure given rising production, expanding inventory, sluggish demand and loss of discretionary blending for biodiesel. Low crude prices continue to depress palm oil.

Some weather forecasters are talking about incipient signs of El Nino in South-East Asia.

Last year, the weather phenomenon turned out to be a mild one, despite predictions of a severe one.

An interesting aspect of El Nino many analysts are unaware is that whenever South-East Asia faces El Nino conditions, North America usually enjoys excellent spring weather which in turn boosts the prospects of grains and oilseeds.

It has happened several times in the past, the last one being 2014.

Global warming hits fish availability

Climate change is taking a toll on fisheries sector with the consequent ocean warming posing multiple threats to biodiversity and functioning of ocean ecosystem.

The decline in fish availability off Indian coasts could be attributed to the consequences of global warming and climate change and its impact on ocean ecosystem, B Madhusoodana Kurup, Vice-Chancellor of Kerala University of Fisheries and Ocean Studies (KUFOS), said.

Various aquaculture practices in inland water bodies of the country are badly being affected due to these phenomena, he said while speaking at the $3\{+r\}\{+d\}$ international conference on Global Warming and Food Security at UAE.

Climate change causes sea level rise, extreme weather events, increased frequency of diseases and toxic events and uncertain supplies of freshwater.

The major impacts of sea level rise are on coastal agriculture, tourism, freshwater reserve, fisheries, aquaculture, human settlement, biodiversity, damage to fishery infrastructure such as landing centres, harbours, etc.

He also called upon policymakers and authorities to focus on implementing long-term programmes to tackle the issue.

The Kerala State Action Plan on Climate Change, a project initiated by the State Government aimed at integrating climate change strategies into the development planning process, is a right step towards addressing the issue of climate change, he said.

Brown rot disease mars export prospects of Indian potatoes



With the Russian phytosanitary services cracking down on potatoes from Egypt, it could have been a blessing in disguise for Indian exporters had it not for the brown bacterial rot disease.

Early April, while the quarantine phytosanitary control of two potato consignments weighing 57 tonnes imported from India was on, the bacterial rot (*Ralstonia solanacearum Yabuuchi*) was noticed.

According to information available to *BusinessLine*, there were nine cases in 2011 and 23 cases in 2014 when brown rot was detected in plant products imported from India.

Brown bacterial rot in potatoes is dangerous, says a statement from Russia's Federal Service for Veterinary and Phytosanitary Surveillance. Also called bacterial wilt, Brown rot affects the potato plant's vascular system and systemically spreads to progency, causing the vascular ring of infected potatoes to go brown, starting from the heel end.

This eventually leads to the whole tuber turning brown and rotten. Sources said that the agency has brought the issue to the notice of Ministry of Agriculture here, and necessary steps are being taken to respond to Russia's concerns. If weather conditions are favourable for the development of the disease in Russia, the yield of some crops could slump by 50 per cent, the official surveillance agency has said.

Potato disease

Based on the assessments of the specialists from the Russian Agricultural Academy, the potential losses from the possible introduction of brown rot to Russia could be more than 50 billion rubles a year.

If stored incorrectly, a potato affected by brown rot could decimate entire consignments and could cause losses accounting for over 40 per cent, the agency has noted.

They have pointed out that an outbreak of this kind will also threaten tomatoes, apart from potatoes in Russia's southern regions.

India's exports

The agency has held that it reserves the right to impose temporary restrictions on the import of Indian potatoes. Exports of potato from India jumped from 1,93,085.84 tonnes in 2011-12 valued at ₹133.45 crore, to 2,20,926.10 tonnes in 2013-14 valued at ₹251.14 crore, according to the Agricultural and Processed Food Products Export Development Authority (Apeda).

Nepal, Sri Lanka and Russia were the top three importers.

While exports to Nepal accounted for 1,48,343.22 tonnes valued at ₹105.49 crore in 2013-14, exports to Sri Lanka were 24,652.49 tonnes valued at ₹50.05 crore during the same period. India exported 9,826.08 tonnes of potato to Russia in 2013-14, valued at ₹18.23 crore.

Egypt case

Even in the case of Egypt, sources indicated that frequent violations of regulation with regards to quarantine have resulted in the temporary ban.

Russian phytosanitary services had detected brown rot bacteria and golden cyst nematode in Egyptian potatoes.

Imports of Egyptian potatoes to Russia had exceeded 3,00,000 tonnes.

Cane acreage on the rise even as arrears pile up



Even as dues owed by mills continue to rise, sugarcane farmers in India appear to be undeterred by delayed payments and a depressed market as per the latest data for acreage of Kharif crop released by the Agriculture Ministry here on Friday.

The area sown in 2015-16 has already increased marginally by 0.20 per cent over the 2014-15 season. As on Friday, 40.18 lakh hectares (lh) had been sown across the key sugarcane growing States in the country against 39.98 lh during the corresponding period the previous year.

Increased coverage was reported in Uttar Pradesh (0.38 lh), Madhya Pradesh (0.43 lh) and Gujarat (0.19 lh) while it declined it Maharashtra (0.61 lh), Bihar (0.36 lh), Tamil nadu (0.15 lh), Andhra Pradesh (0.13 lh), Haryana (0.11 lh) and Karnataka (0.09 lh), among others.

Sturdy crop

The main reason cited by farmers for having stuck to growing sugarcane despite arrears touching Rs.22,000 crore as of April 15 with mills in UP accounting for more than Rs. 9,000 crore, is because the crop is far sturdier than wheat or potato in the face of vagaries of the weather.

"It (cane) can withstand heavy rain and hailstorms which affected a lot of the standing wheat crop over the last two months. However, despite the (Allahabad) High Court order stating that payments need to be made within 14 days of procurement, that still isn't happening," said Kuldeep Tyagi, who grows cane across 2 acres of his 4-acre farm in Khaspur village, Meerut district in UP's fertile western belt.

Another farmer in the area, who requested anonymity, claimed that just one company – Mawana Sugars, which announced closure of its mills in March – owed around 40,000 farmers nearly Rs. 450 crore, of which Rs. 125 crore was pending from last season.

Better returns

An industry official, however, said that despite payments being made late, the returns from sugarcane outstripped that from other crops.

The UP government, for example, set a State Advised Price of Rs. 280/quintal against the Centre's Fair and Remunerative Price of Rs. 220/quintal. The minimum support price (MSP) for wheat, the other major crop grown in the State was Rs. 1,450/quintal.

"Farmers have confidence in cane as a crop. Not only is it more weatherresistant, the kind of money they are paid, although slightly late, still puts them in a better position vis-à-vis other crops," said an industry official.

Depressed market

Production in the country, the world's second largest sugar manufacturer, is already slated to touch a near-decadal high of 280 lakh tonnes (lt) since 283.6 lt was recorded in the 2006-07 sugar season (October-September).

As of April 30, mills had produced 273.74 lt which was around 14.3 per cent higher than at the same time the previous year when output was pegged at 239.43 lt, according to data provided by the Indian Sugar Mills Association (ISMA).

The glut has kept prices depressed in the domestic market which makes it difficult for mills to pay sugarcane farmers, particularly at a time when the cost of production exceeds returns from sales of the sweetener.

Ex-factory realisation in UP, the country's second largest sugar producing State, firmed by Rs. 50/quintal over the last month and is currently at Rs. 2,700-2770/quintal, the official said.