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THE MORE HINDU

'Nendran' prices touch an all-time high



A farmer harvesting 'Nendran' variety of plantain from his farm in Wayanad district.

Farmers unlikely to benefit as crops have been destroyed in rain

The price of 'Nendran' variety of plantain has reached an all-time high, thanks to a sharp decline in production.

The spot price of the plantain touched a record Rs.53 a kg at the Kalpetta market in Wayanad on Friday, as against Rs.18 to Rs.22 a kg during the corresponding period last year.

It was Rs.42 a kg a week ago.

The price might rise further in the coming days, sources said.

"During this season, the Nendran variety usually arrives from Mettuppalayam in Tamil Nadu. Some of it also comes from Wayanad and Mannarkkad in Palakkad district," K. Abdulkareem, a leading plantain trader here said. But the adverse climate in these plantain-producing areas destroyed most of the crops, leading to scarcity in the market, he said.

Area dwindles

Moreover, the area of cultivation also dwindled considerably in the district following the rock bottom price of the produce for the past two years and increasing input cost for cultivation, especially labour cost, he added.

8,900 hectares

Agriculture Department data reveal that nearly 8,900 hectares of land has been utilised for plantain cultivation this year against 12,400 hectares last year.

"Though price has increased considerably this year, farmers are unlikely to benefit as they had suffered huge losses owing to the adverse climate," farming sources said.

As per the data with the department, as many as 4.25 lakh bunched and nonbunched plantains to the tune of Rs.5.49 crore were destroyed in rain-related calamities in the district.

Farmers' grievance meet on July 29

The monthly farmers' grievances meeting would be held on July 29, Collector K.S.Palanisamy said in a press release.

The meeting would be held at 10.30 a.m. at the Collector's Office.

Wholesale and retail dealers in fertilizers and pesticides from Manapparai and Vaiyampatti areas in the district were cautioned against selling fertilizers above the stipulated prices.

Speaking at a meeting with dealers from these areas, officials of Agriculture Department also urged the dealers to maintain their stock registers properly.

Licences of those found selling sub-standard fertilizers would be cancelled, they warned.

The officials also urged the dealers to extend their cooperation when Agricultural officers visited them to collect samples.

The dealers were also briefed on the fertilizer policy and regulations.

K.Sait Mohamed, R.Santhanakrishnan and N.Kannan, Assistant Directors of Agriculture, and other officials spoke.

23 mandis in 8 States integrated with e-agriculture market so far, says Centre

The government on Friday said 23 mandis in eight States have been integrated with the electronic national agriculture market (e-NAM) so far while the target is to connect 200 by September.

"Proposals from 12 States for integration of 365 mandis with e-NAM have been approved, of which 23 mandis have been integrated with e-NAM," Minister of State for Agriculture Sudarshan Bhagat said in a written reply to the Rajya Sabha.

The target is to integrate 200 mandis by September this year and a total of 585 by March 2018, he said.

For Telangana, the Centre has approved integration of 44 mandis with e-NAM, out of which five have been linked so far, he added.

As per the data placed before the Upper House, six mandis from Uttar Pradesh, five from Telangana, four from Haryana and three from Gujarat have been integrated into e-NAM. Himachal has integrated two mandis while Jharkhand, Rajasthan and Madhya Pradesh have done one each.

However, only one commodity is being traded at present via electronic platform from each mandi, the data showed.

For instance, in Uttar Pradesh, all six mandis are trading wheat on the eplatform while Patan district in Gujarat is dealing in castor seed and Botad mandi in Bhavnagar district is handling chana (black gram).

The two mandis of Haryana are trading sunflower seed while Himachal Pradesh is focussed on shelling peas, the data showed.

In April, Prime Minister Narendra Modi had launched the e-NAM scheme in 21 mandis of eight States.

The government has allocated Rs 200 crore for this scheme.

Under the scheme, a pan India e-trading portal is being deployed in select regulated wholesale markets in States.

For integration with e-NAM, states are required to complete certain prerequisite reforms in their respective Agriculture Produce Marketing (Regulation) Acts.

The scheme is expected to benefit farmers through enhanced market access by way of allowing remote online bidding for their produce, removal of information asymmetry between buyers and sellers, real-time price discovery based on actual demand-supply gap through transparent online auction and online payment directly to farmers' accounts. - PTI

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Focus on improving farmers' income

High-yielding crops, intercropping and infusion of value-addition techniques could enhance farmer's income and livelihood, former Deputy Director General (Horticulture), Indian Council of Agricultural Research (ICAR), K.L. Chadha has said.

Dr. Chadha was inaugurating a two-day national seminar on 'Plantation-based Cropping System for Improving Livelihood Security,' organised as part of realising Prime Minister Narendra Modi's vision to double farmers income by 2020, at the Central Plantation Crops Research Institute (CPCRI) here on Friday.

Addressing the function, P. Rethinam, former Executive Director of the Asia Pacific Coconut Community, Jakartha, suggested that the CPCRI demonstrate its technologies, particularly integrated farming system, in plots of 100 farmers to celebrate its 100th anniversary.

CPCRI Director P. Chowdappa, in his introductory remarks, briefed the achievements of the CPCRI.

The function saw launching of three varieties of crops — kalpa shatabdhi in coconut, shatamangala in areca nut, and netra centura in cocoa. A coconut sugar-based chocolate was also launched to mark the centenary year celebration of the institute.

Over 100 delegates and stakeholders attended the programme.

CPCRI holds seminar on Plantation-based Cropping System for Improving Livelihood Security

Farmers sour over mango production data

Mango production has recorded an increase of six per cent in India this year and production in Tamil Nadu doubled from the yield in 2013-2014, according to data submitted by the Agriculture Ministry to Parliament. However, farmers in the State claim the data is wrong.

According to the data presented to Parliament earlier this week, mango production in Tamil Nadu is estimated to have increased to 16.60 lakh tonnes in 2015-2016 as per advanced estimates. In 2014-15, production was 8.97 lakh tonnes, while in 2013-14 it was 7.85 lakh tonnes. The department filed the data based on information submitted by the States.

But farmers doubt the authenticity of the data. In the past two years, drought and rains have played havoc with the flowering and there is no possibility of production having doubled in one year, they said.

"Climate change is leading to heat waves and floods, and in the past two years, it has led to a fall in production of mangoes," P. Shanmugam, State General Secretary, Tamil Nadu Vivasayigal Sangam (TNVS), told *The Hindu*. He said last year, farmers raised the issue of loss of production and protested against a drop in prices of mangoes. "Also, the area under production has not gone up," he said.

T.N. Balamohan, Dean, Horticultural College and Research Institute, Periyakulam, too said for production to double in a year, the plants should have been planted at least five years ago. "Most of this data might have been sourced from farmers. There are about 1.5 lakh hectares in the main mango production regions of the State such as Dharmapuri, Krishnagiri, Madurai, Salem, Rajapalayam, Tirunelveli and Thoothukudi," he said.

According to Mr. Balamohan, if there is a price increase for mangoes, then the areas in which the crop is grown also increases in the corresponding year. He too points out the impact of global warming on production, as the flowering season which used to be from December to January, now extending till March.

'Technologies not reaching farmers'

Around 70 per cent of advanced farm technologies developed by scientists don't reach farmers, P.M. Salimath, Vice-Chancellor, UAS Raichur, said here on Friday.

He was speaking at the launch of a diploma in agriculture extension for seed and fertilizer traders in Krishi Vigyan Kendra.

"We have to ask ourselves if it is because we think they are too sophisticated for common farmers," he said.

He said that there was an acute scarcity of extension workers in the country.

"With the current staff, the government, universities or institutions like ICAR could not reach every farmer. Hence the need for alliances with groups like input dealers. That is why the government has stated this course," he said.

UAS- R has brought out social media applications to increasing the base of extension. Our e-solutions against pests and weeds (e-sap) is helping farmers by ensuring real-time diagnosis.

Farm facilitators are using them extensively. They can send pictures of pests and weeds and seek expert advice, he said.

"The State government wants to increase the reach of such applications by working with universities. It will help input dealers become para-extension personnel," he said. He also felt that the extension seems to have lost focus. "It has to keep the welfare of farmers, and keep pace with research and development.

While research is getting stronger over the years, extension is weaker. We need to fix this," he said.

"We can not forget, however, that it is the extension workers who addressed the problem of hunger with significant success. From a food-importing county at Independence, we have become a grain-exporting nation, despite the population growing six times.

For this, among others, we should applaud farm scientists with the same vigour that we appreciate the work of space scientists who launch satellites," he said.

He cautioned against the indiscriminate use of inorganic fertilizers.

Course coordinator Pramod Katti said that of the 1.43 lakh posts of agricultural extension workers in the country, over 52,000 posts are vacant.

This needs to be filled by appointing new officers and by exploring alternatives channels like empowering existing resource persons like input dealers.

State to ink pact with ISRO

The Telangana Government and the Indian Space Research Organisation (ISRO) will be signing a memorandum of understanding (MoU) for water resources information system portal on August 6, according to Irrigation Minister T. Harish Rao on Friday.

After going through the PowerPoint presentation about the satellite-based portal along with Irrigation Secretary S.K. Joshi and other senior officials, the Minister said that ISRO Chairman Kiran Kumar will be present for the ceremony.

The dynamic data once ready will be of great help to the administration as it can keep the planners and the farmers informed about the rainfall forecast, current water availability, crops monitoring and evaluation, etc.

Vet varsity to join hands with NDDB

The Kerala Veterinary and Animal Sciences University (KVASU) is preparing to sign a memorandum of understanding with the National Dairy Development Board (NDDB), Anand, in the areas of animal husbandry and dairying.

As part of finalising the proposed MoU, a team of NDDB officials, led by T. Nandakumar, chairman of the board, will visit the varsity headquarters at Pookode in the district on Monday.

The MoU intends to share objectives in the field of animal husbandry and dairying with a view to enhancing the socio-economic status of farmers.

"According to it, both institutions would agree to promote cooperation in conducting joint research and extension of animal husbandry practices through studying impact of various interventions on productivity of cattle and buffaloes in the country," T. P. Sethumadhavan, Director of Entrepreneurship, KVASU, said.

Joseph Mathew, Registrar, KVASU, will preside over the function.

Give priority to rainwater harvesting: expert

Sekhar Raghavan, director, Rain Centre, Chennai, and expert on rainwater harvesting, said on Friday that the authorities should give priority to rainwater harvesting in Udupi district despite the fact that it received plentiful rain during the monsoon.

He was speaking at a seminar on rainwater harvesting systems organised by the Human Rights Protection Foundation, here.

Mr. Raghavan said that open wells still existed in the district. These should be encouraged and preserved. Public lakes should be preserved.

The run-off water from roads could also be harvested by sinking recharge wells close to the roads with storm water drains.

The water in the stormwater drains should be intercepted and diverted to the recharge wells.

He said that Udupi might not have as much water problem as Manipal as the latter was located on the hill and the water ran down from it. Among the States, some were concerned about rainwater harvesting, while others simply paid lip service to it.

Delhi Chief Minister Arvind Kejriwal was more committed to implementing rainwater harvesting systems there. It was high time that a Rain Centre was set up here. It was necessary to create more awareness among people about the importance of rainwater harvesting, he said.

The centre started in Chennai in 2002 was a one-stop information centre helping the general public to know about rainwater harvesting and to implement it in their respective houses, flats, offices etc. Working displays of rooftop harvesting, driveway runoff harvesting near the gate had been set up at this centre.

The centre also conducted awareness programmes on rainwater harvesting for school and college students with video presentations and workshops for builders and plumbers. The entire service was being provided free of cost, he said and explained various rainwater harvesting methods.

Ravindranath Shanbhag, president of HRPF, said that the HRPF would do a survey of lakes in Udupi district. The Herikeri Lake near Basrur used to help farmers grow two to three crops a few decades ago. Now the lake had become defunct and farmers grew only one crop.

There were about 1,700 laterite quarries in the district. Efforts would be made to find out if these could be used for recharging water table. The HRPF will also provide free consultancy to people wanting to implement rainwater harvesting in their houses and buildings. "We will start a Rain Centre here," he said.

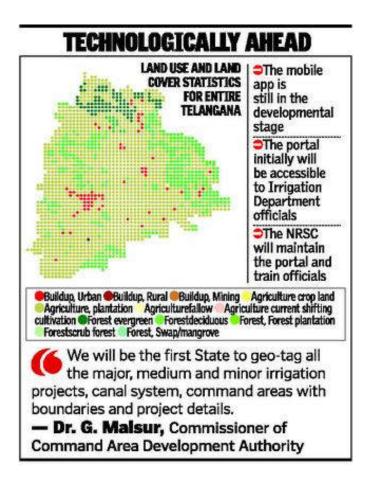
Vasanth Rao and Jagadish Acharya, were present.

Water in stormwater drains should be intercepted and diverted to

recharge wells'

Telangana to geo-tag irrigation projects with NRSA, Icrisat help

Information on water availability and cropping pattern in all irrigation systems throughout the State can be had on the mobile phone



Soon, everyone from citizens to farmers, administrators and policy makers can gain access to information about water availability and cropping pattern in all irrigation systems throughout Telangana on their mobile phones along with satellite maps.

While the mobile app is still in the developmental stage, the Irrigation and Command Area Development (I&CAD) Department is getting ready to build an exclusive Telangana Water Resources Information System (TWRIS) portal with the help of the National Remote Sensing Agency (NRSA) for a holistic geospatial data base for the total irrigation system.

Geospatial data

The NRSC through Cartosat satellites will be providing geospatial technology support from the Bhuvan geo-platform with necessary tools and interfaces. Geospatial data on natural resources, drainage, water bodies, etc., generated from different sources, will be published and enabled for online access through the portal for use by the department.

"We will be the first State to geo-tag all the major, medium and minor irrigation projects, canals system, command areas with boundaries and project details with help of satellite imagery to be updated once every fortnight," explains Commissioner of Command Area Development Authority Dr. G. Malsur.

Cropping pattern

The portal, which will initially be made accessible to the irrigation department officials, is being designed to provide information about water availability in any given project at a given point of time, data related to cropping pattern, whether it is a single crop or double crop for kharif/rabi, drought intensity, total irrigated area etc., for every cropping season.

"We will also be in a position to know the irrigation potential utilised, the ayacut gap in the command area and whether there is any overlap of the command area," he says. Icrisat (International Crops Research Institute for Semi-Arid Tropics) has also been roped in for information about the cropping patterns and irrigated area mapping with details of canal or well or ground water or rainfed.

The NRSC will be maintaining the portal and also train officials for using the portal and satellite data based irrigation management applications, in facilitating data generation and verification.

Special scheme to increase millets, pulses and oilseed production

Finance Minister O. Panneerselvam announced a new scheme for dry land farming with special focus on increasing the production of millets, pulses and oilseeds.

Presenting the budget for 2016-17, he said water conservation measures would be an integral part of the scheme. "Mixed farming will be promoted in dry lands by supporting mini dairy and poultry units to supplement farm income," he said.

Mr. Panneerselvam said a special self-sufficiency pulse production programme would be launched in the current year and objective was to promote cultivation of green gram, black gram and red gram under irrigated conditions.

He said the State had planned to bring 27.50 lakh acre under pulse cultivation in 2016-17 and aiming for an overall production of 9.80 lakh tonnes.

Stating that the policy of providing subsidies to micro-irrigation would continue, he said in 2016-17 the scheme would be adopted in 28,540 acres of agricultural crops and 86,707 acres of horticultural crops.

The fund allocation is Rs. 319 crore.

Agricultural markets

Mr. Panneerselvam said necessary amendments would be made in the Tamil Nadu Agricultural Produce Marketing (Regulation) Act, 1987 to improve the efficiency of agricultural markets.

This is part of the government's initiative to upgrade and integrate agricultural markets and link them with commodity markets with sufficient financial support.

Subsidies to

micro-irrigation will continue and

Rs. 319 crore is allotted for it



E-agri market integrates with 23 mandis in 8 states so far

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real-time price discovery based on actual demand-supply gap through transparent online auction and online payment directly to farmers' accounts.

A first, but big step

Maharashtra's decision to end APMC monopoly in fruits and vegetables should be emulated by other states

The Maharashtra government has done well not to give in to pressure to rollback its decision to delist fruits and vegetables from the state's Agriculture Produce Market Committee (APMC) Act.

Delisting basically allows companies or traders to buy produce directly from farmers, rather than having to go through licensed middlemen in regulated APMC mandis.

While farmers could always technically sell to anybody anywhere, this freedom, however, had little meaning when buyers did not have the same flexibility to bypass the mandis.

The very fact that one needed a mandi license to be able to transact — and multiple licenses were required across different APMC jurisdictions within the same state — automatically limited the universe of buyers for the farmer.

The only beneficiaries of such an arrangement were the mandi intermediaries, who pocketed a commission on each purchase simply by virtue of being middlemen between farmers and buyers.

It is unlikely that the Maharashtra government's move will eliminate middlemen or mandis.

Not many farmers, after all, have the resources or reach to strike deals on their own with corporates or retailers. Most would continue to load their oranges and pomegranates on to trucks owned by village or mandi-level aggregators.

Agro-processors and retail chains are unlikely to fan out and set up collection centres all over the countryside.

The previous Congress-NCP government in Maharashtra had, in fact, issued some 200 direct marketing licences for purchase of not just fruits and vegetables, but all farm produce.

But most of these licences are dormant and the value of purchases undertaken against these is a fraction of the trade happening in the APMC mandis.

The big corporate buyers, in all probability, would continue to source predominantly from intermediaries.

The mandis, too, will retain their relevance because it isn't easy to replicate the infrastructure — market yards, purchase centres, link roads, etc — many of them have created in remote towns.

The reform that Maharashtra has now implemented is not about middlemen or mandis, but about dismantling monopolies. Corporates today are reluctant to deal with several thousands of fragmented producers.

But if farmers were to increasingly resort to aggregating their own produce through cooperatives and self-help groups, the same corporates may see the transaction costs of direct purchases through these organisations falling to even below the commission fees being paid to mandi agents.

A part of these savings they may well pass on to farmers. Such a process should be enabled, for which giving producers and buyers the option of transacting both inside and outside the mandi is a first step.

Kharif crops output likely to be better this year

Till last week, total area sown to kharif crops was higher by 11.38 lakh hectares when compared to the year-ago period



The sowing of kharif crops has begun with the start of the southwest monsoon from June.

The country's overall production of kharif crops like paddy is likely to be better than the last year if southwest monsoon rainfall continues to be favourable in the next two months, the government said on Friday.

The sowing of kharif crops has begun with the start of the southwest monsoon from June. Several parts of the country have received good rains, boosting the planting operations.

"In view of better progress of sowing of kharif crops, if rainfall conditions during the remaining period of current monsoon season continues to be favourable as per prediction of IMD, this year's production scenario of kharif crops should be better than the last year," Minister of State for Agriculture Sudarshan Bhagat said in a written reply to the Rajya Sabha.

Till last week, total area sown to kharif crops was higher by 11.38 lakh hectares when compared to the year-ago period, he said.

He also said that it is too early to have firm assessment of the kharif production for this year as the initial estimates are normally released in September.

India Meteorological Department (IMD) has projected better than normal rains after two drought years.

In a separate reply, Minister of State for Agriculture Parshottam Rupala said the central schemes on agriculture are implemented for all farmers including SCs and STs.

About 8 per cent and 15-16.2 per cent of the total funds allocated to the ministry are earmarked for tribal sub-plan and scheduled caste sub plan, respectively, during the current 2016-17 fiscal, he added.

Despite good monsoon, half of Punjab, Haryana face rain deficit

Insufficient rain in many districts has put an extra burden on underground water of Punjab, which is growing 29-30 lakh hectares of paddy rice this year



Of 23 districts in Punjab, four recorded much above rainfall the normal while over 10 districts have been facing the problem of rain deficit even in full monsoon season. (Source: Express Archive)

Despite forecast of a good monsoon, around 50 per cent districts of Punjab, which account for the highest contribution of rice crop, around 30-35 per cent (one-third of the country) to the central pool, and neighbouring Haryana are still dry in the season of the water-guzzling paddy rice growing crop.

Although the states had witnessed almost normal pre-monsoon showers, which was an indication of the good monsoon this year, now insufficient rain in several districts has put an extra burden on the underground water of the state, which is growing 29-30 lakh hectares of paddy rice this year.

Till July 20, around 152.2 mm monsoon rain was received by the state against the normal 162.0 mm which is -6 per cent departure from the normal rainfall. However, the main concern is that around 50 per cent districts of Punjab are facing deficit of rain despite over all good rainfall.

The information procured from the Met department revealed that of 23 districts, four recorded much above normal rainfall while over 10 districts, including Faridkot, Firozpur, Fathegarh Sahib, Mohali, Patiana, Hoshiarpur, Jalandhar, Nawanshahr, Ludhiana etc have been facing the problem of rain deficit even in full monsoon season.

Firozpur is witnessing -70 per cent rainfall on monsoon the district had also witnessed -93 per cent pre-monsoon rainfall. Against the 110.4 mm normal rainfall which the district should get by now, it has received only 33.6 mm, a departure of -70 per cent from the normal.

Mohali and Patiala also got -62 and -50 per cent rainfall respectively. Jalandhar and Hohiarpur received -55 and -29 per cent of rainfall till date this year.

Faridkot and Fatehgarh Sahib recorded16 and 40 per cent rainfall respectively. Only Kapurthala, Amritsar, Tarn Taran, and Barnala districts received above normal rainfall, while remaining 10 districts have got normal rainfall. In Kapurthala district, 81 per cent above the normal rainfall has been received. Against the normal 142.2 mm, the district received 257.1 mm during June 1 to July 20 period.

Similarly in Amritsar district saw an increase of 56 per cent more rain was seen where 268.2 mm rainfall was recorded against the normal 172.3 mm.

It may be noted that with the missing of first three weeks monsoon showers results in the heavy exploitation of groundwater during paddy season in state where 102 of 141 Agricultural development blocks have already gone dry and ground water is available at around 200 feet down.

"Though overall monsoon is almost normal in Punjab till date but we need it all over the state, not excessive in some pockets and deficit in other portions of state," said Punjab Agriculture department director, Dr J S Bains.

"We are not getting rain across the state...in some districts there is heavy rain while others are dry," said Amarjit Singh, a farmer from Jalandhar.

The situation in neighbouring Haryana, which also grows rice on around 12-13 lakh hectares, too is not good.

Of 22 districts of Haryana more than 50 per cent districts have been facing deficit monsoon rain till date.

These districts included Kurukshetra (-81 %), Panipat (-66%), Panchkula (-61%), Karnal (-42%), Kaithal (-53%), Ambala (-59%), Rohtak (-38%), Sonepat (-36%), sirsa (-40) etc.

Overall-10 per cent deficit rain fall recorded in Haryana till date. India Met Department director Surinder Pal, who is based in Chandigarh, said as per the weather indications, the monsoon in the beginning was weak in both the states but added that it would cover the entire areas in the coming days.

Himachal Pradesh govt to plant one crore saplings in a year: Virbadhra Singh

The Himachal Pradesh Chief minister also stressed the need for protection of animals, birds and wildlife.



Acharya Dev Vrat, Governor of Himachal Pradesh being welcomed by Chief Minister Virbhadra Singh and Vice Chancellor ADN Bajpai during the foundation day function of HP University in Shimla on Friday. PTI Photo

Himachal Pradesh Chief Minister Virbhadra Singh on Friday said the state government was taking steps to preserve forest and maintain ecological balance and a target of planting one crore saplings has been set for 2016-17.

After planting a Chinar sapling on the campus of Industrial Training Institute (ITI) near Summerhill as part of an event, Singh said a target of planting one crore saplings, including 35 herbal plants, has been fixed for 2016-17 and Rs 150 crore has been earmarked for the purpose.

He said, "It is our duty not only to preserve forests but also plant more trees and ensure their survival as forests are vital for maintaining ecological balance."

He also stressed the need for protection of animals, birds and wildlife.

The Chief Minister said Himachal Pradesh was the first in Asia to earn carbon credit. Accordingly, a sum of Rs 1.93 crore has been received from the central government as the first installment, which was distributed to self-help groups associated with plantation drives and allied activities.

He said forest and agricultural lands have been infested with weeds, especially 'lantana, affecting the livelihood of farmers.

India, US to jointly develop resource mapping satellite for launch in 2021

The satellite will be useful for variety of applications like natural resources mapping and monitoring, assessing soil moisture, etc



ISRO will be responsible for design and development of S-band SAR (Image for representational purpose)

The Indian Space Research Organisation (ISRO) and NASA's Jet Propulsion Laboratory are jointly working on the development of a Dual Frequency (L&S band) Synthetic Aperture Radar (SAR) Imaging Satellite named as NASA-ISRO Synthetic Aperture Radar (NISAR). The project is slated to be completed and launched by 2021, parliament was told on Thursday.

ISRO will be responsible for design and development of S-band SAR, Spacecraft Bus, data transmission system, spacecraft integration and testing.

The radar will be launched using the Geosynchronous Satellite Launch Vehicle (GSLV) and ISRO will also be reponsible for the in-orbit operations, Minister of State in the PMO Jitendra Singh, who also holds charge of the Space Department, told the Rajya Sabha in a written reply.

The NASA laboratory will be responsible for design and development of Lband SAR, 12m unfurlable antenna and its deployment elements, global positioning system (GPS) and data recorder.

The L and S band microwave data obtained from this satellite will be useful for variety of applications, which include natural resources mapping & monitoring; estimating agricultural biomass over full duration of crop cycle; assessing soil moisture; monitoring of floods and oil slicks; coastal erosion, coastline changes and variation of winds in coastal waters; assessment of mangroves; surface deformation studies and others.

ISRO, JPL/NASA are working towards realisation of this mission by 2021 and both agencies have obtained necessary approvals from respective governments, he said.

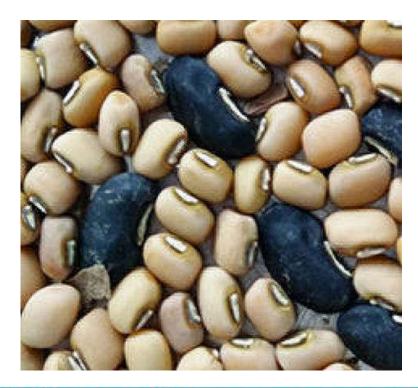
The joint science observation plan has been documented with the participation of Indian and American scientists.

The core science teams of India and US meet every six months to discuss various observation requirements and strategies of science observation.

The technical teams of both the agencies are working towards building the necessary systems, Singh said.

BusinessLine

As cotton wilts, farmers switch to planting pulses; acreage up 39%



Gaining momentum		(kharif acreage in lakh hectares as on July 22)	
Crop	This Year	Last Year	% change
Rice	183.06	182.38	0.37
Total pulses	90.17	64.69	39.39
Tur (Arhar)	35.90	23.44	53.15
Uradbean	21.76	16.64	30.79
Moongbean	23.10	16.06	43.84
Total coarse cereals	130.80	126.27	3.59
Jowar	14.59	13.52	7.91
Bajra	43.36	45.58	-4.88
Maize	68.26	62.61	9.01
Total oilseeds	149.16	143.03	4.28
Groundnut	34.00	27.12	25.35
Soyabean	106.06	104.81	1.19
Sunflower	1.19	0.53	124.52
Sugarcane	45.41	47.40	-4.20
Jute & Mesta	7.52	7.71	-2.49
Cotton	86.86	99.52	-12.72
Tota	692.98	671.01	3.28

Pulses such as tur (arhar), urad, moong, and oilseeds — mainly groundnut and sunflower — and maize have turned out to be the hot favourites of farmers, who

have brought a larger area under these crops in the ongoing kharif planting season.

The prevailing high prices, coupled with an increase in the support price and bonus incentive announced by the Centre, is the main reason farmers in Maharashtra, Karnataka, Rajasthan, Madhya Pradesh and Telangana have shifted their cropping preference to pulses, resulting in higher acreages for lentils in these States.

As a result, cotton has suffered the acreage loss.

Pest attacks such as pink bollworm and whiteflies, and an unattractive price last year has triggered this shift across States from the fibre crop to pulses and other crops.

Similarly, the bullish trend witnessed in recent months has attracted farmers to maize, mainly in States such as Karnataka, Madhya Pradesh and Maharashtra.

The farmers' interest in rice, the main cereal crop in the kharif season, has been sustained, a trend reflected in a marginal increase of the acreage over last year as transplanting of paddy has picked up in recent weeks on monsoons.

An increase in overall kharif acreage so far, aided by widespread distribution of monsoon rains across the country, has raised the prospects of a better kharif harvest this year.

The cumulative rainfall in the monsoon season so far has been normal, with average precipitation across the country pegged at 367 mm.

About 80 per cent of the country's geographical area encompassing 29 metrological sub-divisions has received normal-to-excess rains, resulting in an improvement in reservoir levels in these regions.

The remaining seven metrological sub-divisions, accounting for 20 per cent of the area, have received deficient rainfall. Rainfall has been deficient in Kerala, Gujarat, Saurashtra & Kutch, Western Rajasthan, Himachal and the North-Eastern states.

Besides cotton, acreages of other crops that have suffered a setback this kharif include sugarcane, jute and mesta, bajra, sesamum, niger and castor.



Monsoon surplus wiped out; southern trigger awaited

The monsoon has forfeited the surplus built up over the country as a whole thus far and is looking for a trigger to get going again from the South Peninsula.

Region-wise, the surplus is 2 per cent over North-West India, 1 per cent over the South Peninsula, and 11 per cent over Central India as of Friday.

East and North-East India persisted with a deficit of -16 per cent.

Projections by the India Met Department suggest a fresh burst of rains may materialise from the South during this week (July 21 to 25) from the Andhra Pradesh and Tamil Nadu coasts.

North-west dry

Madhya Pradesh, adjoining Gujarat, East Rajasthan, Uttarakhand, Punjab and Himachal Pradesh may witness a dry phase during the week, while normal rains are indicated for West Rajasthan.

Heavy to very heavy rains will continue to lash parts of Uttar Pradesh, Bihar and North-East India, the Met projections show.

The last week of July (26 to 30) would see rains consolidate over Peninsular India, grow into west Madhya Pradesh, Gujarat, east Rajasthan, Uttar Pradesh, Uttarakhand, Himachal Pradesh, and Punjab.

Below-normal rainfall is likely to occur during the next two weeks over Saurashtra, Kutch, Konkan, Goa and Coastal Karnataka, says an extended weather forecast brought out jointly by the Met, Indian Council of Agricultural Research (ICAR) and the Central Research Institute for Dryland Agriculture.

Meanwhile, the Met said that normal to excess rains are expected in most parts of the country during the first 10 days of August, which is the second rainiest month of the four monsoon months.

Two-week forecast

The detailed outlook for the next two weeks from the India Met Dept, the ICAR and the Central Research Institute for Dryland Agriculture is as follows:

Normal or above normal rainfall likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, East Rajasthan, Uttar Pradesh, Bihar, Jharkhand, Sub-Himalayan West Bengal, Sikkim, Assam, Meghalaya, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Madhya Pradesh, South Interior Karnataka, Rayalaseema, Kerala and Tamil Nadu.

Centre may relax minimum purchase rule at tea auctions



But refuses demand by traders to allow proxy bidding

The Centre is considering relaxing the pan-India tea auction rules to allow traders to purchase smaller quantities. The present minimum amount prescribed for buyers has made it difficult for small and medium traders to participate in the process.

The demand of tea buyers that proxy bidding be allowed in the auction process, however, has been rejected as the Tea Board, under the Commerce Ministry, is of the view that it could lead to cartelisation and influence prices.

"In our meeting with representatives from the industry, we discussed at length the problems that were being faced by traders after implementation of the new pan-India auction rules.

While we think that their concern on the minimum lot size is valid, it is not possible to allow proxy bidding as it would go against the very concept of a pan-India auction and create cartels," a Commerce Ministry official told*BusinessLine*.

The Tea Buyers' Association, comprising industry representatives, met officials from the Tea Board on Thursday to sort out tricky matters.

The Tea Board will now hold meetings with the NSE.IT — the IT department of the National Stock Exchange, which is a separate company — to bring about changes in the auction process so that the minimum lot size is lowered.

"This is mainly a technical issue and we will sort it out," the official said.

Under the old system, at the Kochi centre, a single buyer could purchase a minimum lot of five bags and up to nine bags of tea; two buyers could buy 10-14 bags; three buyers could purchase between 15 and 34 bags, while four buyers could buy over 35 bags.

Under the new system, the minimum number of bags to be purchased by a single buyer has been increased to 20, while two buyers have to buy 40 and three buyers, 41 bags and above.

Tax issues

On CST, Tea Buyers' Association President Dharmendra Vora told *BusinessLine* the Tea Board had asked the association to approach the Kerala government for tax reduction to 1 per cent at the first point.

"We requested the Chairman to take up the matter and will be following it up," he said.

The association also requested the Board to give operational decision-making rights to each tea trade association with regard to day-to-day operational activities.

Asked whether the association would continue with the boycott of Kochi auctions in the wake of the meeting with the Tea Board, Vora said that a general body meeting would be convened on Saturday to decide on the matter.

Spices export up 9% in value but volume dips



The value of spice exports rose 9 per cent by value in fiscal year 2015-16, over the previous year, despite a 6 per cent decline in quantity.

The increase in value is attributed to favourable currency exchange rates, Spices Board sources told*BusinessLine*.

The exchange rate average in 2015-16 was at around 67 a dollar against around 64 a dollar in 2014-15, they said, adding this has reflected on the unit value and the total value realisation.

Total shipments last financial year stood at 8,43,255 tonnes, valued at 16,238.23 crore, against 8,93,920 tonnes valued at 14,899.68 crore in fiscal year 2014-15.

However, exports have surpassed the set target for the last fiscal year by 104 per cent in quantity and 116 per cent in value, they said.

Top 5 contributors

Shipments of chilli remained by and large unchanged in volume, but in terms of value it gained by 12 per cent.

A substantial increase in value is said to have brought down the export of mint products to 21,150 tones valued at 2,577.59 crore from 25,750 tonnes valued at 2,689.25 crore. The unit value rose to 1,218.72 a kg last fiscal year from 1,044.37 in 2014-15.

The top five export earners are chilli, mint products, spice oil and oleoresins, pepper and cumin.

Black pepper exports up

Meanwhile, export of black pepper showed a significant increase both in terms of quantity and value. Shipments last fiscal stood at 28,100 tonnes valued at 1,730.41 crore against 21,450 tonnes valued at 1,208.42 crore.

The unit value realised in 2015-16 was at 615.81/kg against last year's 563.37.

Business Standard

Rains take a break but sowing in full swing

The showers are expected to return over central and northern parts of India in the next few days, boosting kharif sowing which has already touched 70 million hectares



India's southwest monsoon showed some signs of abating and the rains during the week ended July 20 was seven per cent less than normal, but there was no break in sowing as farmers rushed to take advantage of the available soil moisture.

The showers are expected to return over central and northern parts of India in the next few days, boosting kharifsowing which has already touched 70 million hectares, 3.28 per cent more than the same period last year.

The highest gains have been recorded in pulses, where the sowing area has increased 39 per cent to 9.01 million hectare so far in the 2016-17 kharif season with Karnataka on top.

Pulses area has increased 87 per cent in Karnataka to 1.4 million hectare as of Friday, from 0.75 million hectare compared to the year-ago period, according to agriculture ministry data.

There has been a 30-35 per cent jump in pulses area even in Maharashtra and Rajasthan.

Sowing of pulses and other kharif crops begin with the onset of southwest monsoon from June and harvesting starts from October.

The India Meteorological Department (IMD) has forecast better-than-normal rains for the four-month season ending September.

"In view of better progress of sowing of kharif crops, if rainfall conditions during the remaining period of the current monsoon season continues to be favourable according to IMD's forecast, this year's production scenarios of kharif crops should be better than the last year," Minister of State for Agriculture Sudarshan Bhagat said in a written reply to the Rajya Sabha.

According to the ministry's data, all kharif crops including pulses and paddy have been covered in 65 per cent of the total farm area of 106.2 million hectares.

Out of which, paddy - the main kharif crop - has been sown in 18.30 million hectares so far this season, which is marginally higher from 18.23 million hectares in the year-go period.

Area of coarse cereals has also increased slightly by 3.46 per cent to 13.1 million hectares from 12.62 million hectares, while the area under oilseeds has gone up by four per cent to 14.96 million hectares from 14.3 million hectares in the said period.

The overall good rains have so far been around one per cent above normal with the highest showers recording over central and north West India.

Rajasthan convenes global meet to promote state agriculture

The event aims to empower farmers economically and double their incomes by 2022



To promote sustainable development in agriculture and allied sectors with technological innovations and high yielding practices, the government of Rajasthan is organising Global Rajasthan Agritech Meet 2016 (GRAM 2016) in Jaipur between November 9 and 11, 2016.

The three-day event is being organized in association with the Federation of Indian Chambers of Commerce and Industry (Ficci).

A major producer of oilseeds and pulses, Rajasthan's agriculture sector has always been on the national map.

The state is also one of the largest producers of cash crops like guarseed, jowar and bajra. GRAM 2016 aims to ensure the economic empowerment of farmers through accelerated yet sustainable growth in agriculture, and to double their incomes by 2022.

This international event will provide a common platform for bringing everyone involved in the full value chain of agricultural ecosystem -- farmers, academicians, scientists, technologists, agribusiness companies and policy makers.

GRAM 2016 will offer a platform for companies and service providers to showcase their technological advancements and global best-practices in farming and allied activities to over 50,000 agriculturists from Rajasthan which is a strong performer in agriculture with ten agro climatic zones.

"The government of Rajasthan has initiated many policy changes in agriculture in recent past that relates to technological and infrastructural interventions for sustainable enhancement of farm productivity, reducing post harvest losses and promoting farm based industries.

Investors from across the globe will be able to tap the scope and potential of doing business with over 40,000 farmers who are expected to attend this threeday meet," said a senior official of the Department of Agriculture, Government of Rajasthan.

Kharif crops output likely to be better than last year

Till last week, total area sown to kharif crops was higher by 11.38 lakh hectares when compared to the year-ago period

The country's overall production of kharif crops like paddy is likely to be better than the last year if southwestmonsoon rainfall continues to be favourable in the next two months, the government said Thursday.

The sowing of kharif crops has begun with the start of the soutwest monsoon from June. Several parts of the country have received good rains, boosting the planting operations. "In view of better progress of sowing of kharif crops, if rainfall conditions during the remaining period of current monsoon season continues to be favourable as per prediction of IMD, this year's production scenario of kharif crops should be better than the last year," Minister of State for Agriculture Sudarshan Bhagat said in a written reply to the Rajya Sabha.

Till last week, total area sown to kharif crops was higher by 11.38 lakh hectares when compared to the year-ago period, he said.

He also said that it is too early to have firm assessment of the kharif production for this year as the initial estimates are normally released in September.

India Meteorological Department (IMD) has projected better than normal rains after two drought years.

In a separate reply, Minister of State for Agriculture Parshottam Rupala said the central schemes on agriculture are implemented for all farmers including SCs and STs.

About 8 per cent and 15-16.2 per cent of the total funds allocated to the ministry are earmarked for tribal sub-plan and scheduled caste sub plan, respectively, during the current 2016-17 fiscal, he added.

Farmers planting pulses in big way; area up 39% so far

There has been 30-35% jump in pulses area even in Maharashtra and Rajasthan



Farmers are sowing pulses in a big way as area under the crop has increased by over 39% to 90.17 lakh hectare so far in the 2016-17 kharif season with Karnataka on top.

Pulses acreage has increased by 87% in Karnataka to 14.09 lakh hectare as of Friday, from 7.53 lakh hectare when compared to the year-ago period, according to the data released by the Agriculture Ministry.

There has been 30-35% jump in pulses area even inMaharashtra and Rajasthan.

Sowing of pulses and other kharif crops begin with the onset of southwest monsoon from June and harvesting starts from October.

Monsoon rains are higher by 1%.

The Indian Meteorological Department (IMD) has forecast better than normal rains for the four-month season ending September.

"In view of better progress of sowing of kharif crops, if rainfall conditions during the remaining period of the current monsoon season continues to be favourable according to prediction of the IMD, this year's production scenarios of kharif crops should be better than the last year," Minister of State for Agriculture Sudarshan Bhagat said in a written reply to the Rajya Sabha. According to the ministry's data, all kharif crops including pulses and paddy have been covered in 65% of the total farm area of 1,062 lakh hectare.

Out of which, paddy — the main kharif crop — has been sown in 183.06 lakh hectare so far this season, which is marginally higher from 182.38 lakh hectare in the year-go period.

Acreage of coarse cereals has also increased slightly by 3.46% to 131 lakh hectare from 126.27 lakh hectare, while area under oilseeds has gone up by 4% to 149.16 lakh hectare from 143 lakh hectare in the said period.

Interestingly, pulses have been covered in more than 39% of the area at 90.17 lakh hectare so far this season when compared with mere 64.69 lakh hectare in the year-ago.

In case of cash crops, the acreage of sugarcane, jute and cotton remained lower than the last year's period.

Cotton acreage is down by 14% to 86.86 lakh hectare from 99.52 lakh hectare, while sugarcanearea is lower at 45.41 lakh hectare from 47.40 lakh hectare in the said period, the data showed.

THE TIMES OF INDIA

New wave: Farmers in region reap benefit of e-marketing

Thousands of farmers in the region are using the latest technology to find the prices in major markets, compare it and book orders. This practice ensures them better price for their produce than they would have got by selling it in the local market.

Miraj-based Yasin Malidwale has developed a web portal that offers all the current rates in major markets with an option for comparison. This enables the farmers in the rural areas of Kolhapur, Sangli and Satara districts to choose the better rate offering market and book orders.

Farmers, who are registered with Malidwales website have claimed that their income has gone up because they got a choice for the first time. But farmers organisations said such technology is useful only when farmers start making profits for a long time. Farmers earning more compared to the local market rates does not necessarily mean that they are making profits, they said.

Malidwale has set up the website www.irsagrodirect.com which is being accessed by thousands of farmers, who also get SMS alerts about market rates and demands, among others.

Sidramappa Patil, a vegetable grower from Shirol tehsil, said, "I used to sell vegetables in the nearby markets because that's the market I knew. My income was limited and many times I had incurred losses because of fall in prices due to increase in supply. A few months ago, I came to know about the portal, where I was informed about major markets such as Kolhapur, Sangli, Pune, Solapur and Mumbai. I contacted to the agents from those markets and booked one for my vegetables. I earned more than what I was getting at the local market."

Patil said as he gets daily updates on major markets and their requirements, he can send his produce to those markets where there is good demand. In some cases, the agents book the produce in advance, which also offers better returns.

For instance, Patil never sold spinach in local markets for more than Rs 8 per bunch. From the day he started sending it to major markets, he never got less than Rs 8 per bunch. With he sending more than 50 to 80 bunches, his income has steadily improved.

The portal provides rates of every produce on a daily basis. Malidwale is also sending SMSs to create awareness among farmers. "I am developing an application for smart phones so that farmers can easily access the rates on any previous date, along with the current rate. This would also enable them to upload images of their produce as a proof of quality to the agents or buyers. It would be launched in couple of months." "Today, I have a database of around 50,000 farmers and many of them are getting information on a daily basis.

I am also expanding my base and adding new markets. Growers of banana and other fruits are also using it, because their major markets are in metro cities.

Farmers from Kavathe Mahankal, Jat, Shirol, Jaysinghpur, Miraj, Sangli, Palus, Tasgaon, Hatkanangale, Karad, Wai and Vita are part of my client base, he said.

Similar is the situation with foodgrains as well. Many farmers have started uploading information on what they have sown and they will update estimated production and the time of harvesting.

Based on it, they would get queries from potential buyers such as agents and traders. Since it is an open market, farmers could bargain for better price.

Conventionally, the situation is exactly opposite where farmers bring his foodgrain to trader and accept the rate he has offered, said Malidwale.

Vinayak Hadke, a farmer from Vita tehsil said, "I am part of a group of farmers who grow vegetables and fruits in rotation, so that collectively we can offer a range produce to buyers.

We check the updates from time to time to find out which produce may fetch better rates.

We developed this model with the help of Malidwale so that we could earn more."

"Our income used to be in the range of Rs 200 to Rs 600 per week; now, it has increased to Rs 500 to Rs 800 per week," he said.

Malidwale, a post-graduate in management and diploma holder in web designing, is currently holding farmers' awareness campaigns in village.

THE ECONOMIC TIMES

Monsoon effect: Crop planting jumps 23.8 per cent in one week



Higher planting was recorded in Maharashtra, Rajasthan and Karnataka whereas Odisha, Uttar Pradesh and Jharkhand had lower area under cultivation.

NEW DELHI: Crop planting has jumped 23.8 % in the past one week, helped by heavy rains during the period, with the current overall planting stands 3.28% higher than last year at 692.98 lakh hectare, official data showed. The increase was largely seen in acreage of rice, pulses and coarse cereals.

Water levels in reservoirs have also risen significantly in the past month, providing more water for irrigation which is good news for farmers.

As of July 21, the water available in the 91 important reservoirs was 54.419 billion cubic metres, which was higher than the 10-year average of 52.050 bcm, according to data from the Central Water Commission.

Rice currently covers an area of 183.06 lakh hectare, an increase of 47.7% from last week.

The acreage has largely seen an increase in Maharashtra, Assam, Chhattisgarh and Punjab.

This kharif season rice will be planted on 392.81 lakh hectare. Similarly, the area under pulses acreage rose to 26.9% from the past week, and 39.39% over the previous year in the same period to 90.17 lakh hectare. Planting of arhar has increased more than 53% from last year.

Higher planting was recorded in Maharashtra, Rajasthan and Karnataka whereas Odisha, Uttar Pradesh and Jharkhand had lower area under cultivation.

Area under coarse cereals which includes maize, bajra, ragi, and small millets posted an increase of 23.4% in the past one week to touch 130.80 lakh hectares.

Oilseeds planting also saw a jump by 14.6% from the previous week and now covers 149.16 lakh hectare.

Area under groundnut saw a significant increase from the previous year and has till date been planted on 34 lakh hectares.

Planting of soyabean, an important commodity in the edible oil basket, has also increased and was planted on 106.06 lakh hectares.

The Met department has forecast an above average monsoon this year which is expected to boost the agricultural sector. Heavy rains are expected in several parts of India over the next week. 23 mandis in 8 states integrated with e- agriculture market so far



"Proposals from 12 states for integration of 365 mandis with e-NAM have been approved, of which 23 mandis have been integrated with e-NAM."

NEW DELHI: Government today said 23 mandis in eight states have been integrated with the electronic national agriculture market (e-NAM) so far while the target is to connect 200 by September.

"Proposals from 12 states for integration of 365 mandis with e-NAM have been approved, of which 23 mandis have been integrated with e-NAM," Minister of State for Agriculture Sudarshan Bhagat said in a written reply to the Rajya Sabha.

The target is to integrate 200 mandis by September this year and a total of 585 by March 2018, he said.

For Telangana, the Centre has approved integration of 44 mandis with e-NAM, out of which five have been linked so far, he added.

As per the data placed before the Upper House, six mandis from Uttar Pradesh, five from Telangana, four from Haryana and three from Gujarat have been integrated into e-NAM. Himachal has integrated two mandis while Jharkhand, Rajasthan and Madhya Pradesh have done one each.

However, only one commodity is being traded at present via electronic platform from each mandi, the data showed.

For instance, in Uttar Pradesh, all six mandis are trading wheat on the eplatform while Patan district in Gujarat is dealing in castor seed and Botad mandi in Bhavnagar district is handling chana (black gram).

The two mandis of Haryana are trading sunflower seed while Himachal Pradesh is focussed on shelling peas, the data showed.

In April, Prime Minister Narendra Modi had launched the e-NAM scheme in 21 mandis of eight states. The government has allocated Rs 200 crore for this scheme.

Under the scheme, a pan India e-trading portal is being deployed in select regulated wholesale markets in states.

For integration with e-NAM, states are required to complete certain prerequisite reforms in their respective Agriculture Produce Marketing (Regulation) Acts.

The scheme is expected to benefit farmers through enhanced market access by way of allowing remote online bidding for their produce, removal of information asymmetry between buyers and sellers, real-time price discovery based on actual demand-supply gap through transparent online auction and online payment directly to farmers' accounts. Punjab empanels 5 firms to set up polyhouses to boost vegetable cultivation under controlled atmosphere



The empanelled firms include Earth Agro Structures, Farming Solutions, M.F. Agro & Export, Poly Agro Engineers and E.P.C. Industries Ltd. Nasik.

CHANDIGARH: To encourage cultivation of vegetables under controlled atmosphere, Punjab government has empanelled five firms to assist farmers to set up polyhouses and polynet houses in their fields. The state government will provide subsidy on the greenhouse structures erected by these firms.

The empanelled firms include Earth Agro Structures, Farming Solutions, M.F. Agro & Export, Poly Agro Engineers and E.P.C. Industries Ltd. Nasik.

A government spokesperson said that the state government has established the Centre of Excellence for Vegetables at Kartarpur where training to farmers in the latest techniques in protected cultivation is imparted throughout the year.

Besides, horticulture development officers in each district have been sensitising farmers about the techniques of protected cultivation of vegetables. Hybrid vegetable seedlings are also being provided to farmers at district level, the spokesperson said.