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Make farming remunerative, says Venkaiah Naidu

Scientists urged to undertake more research to improve productivity of farmers.

Union Minister for Urban Development M. Venkaiah Naidu on Sunday urged scientists to undertake more research to improve farm yields and thereby turn agriculture into a remunerative occupation.

The challenge is to empower small and marginal farmers, something crucial not just for them, but also for food security and economic growth, he said, presenting the 5th M. S. Swaminathan Award to agricultural scientist Surender Lal Goswami. An initiative of the Retired ICAR Employees Association and Nuziveedu Seeds Ltd, the award was presented at a function in the city.

Agricultural output had improved significantly in many States, a list topped by Madhya Pradesh and comprising among others Gujarat, Jharkhand and West Bengal. This was bound to relive burden on traditional food basket States, but more needs to be done to consolidate the gains, declared Mr. Naidu, who is also Minister of Housing and Urban Poverty Alleviation besides Parliamentary Affairs.

Debt traps

Absence of good remuneration coupled with the high cost of education and healthcare pushed farmers into debt traps, he said, underscoring the need to promote high value activities such as horticulture and floriculture. Assured income could save farmers from the brink, the Union Minister said. Lack of good facilities in rural areas was also a reason for farmers giving up agriculture and migrating to city.

In addition to government investing more in healthcare and education, private sector should be "encouraged in a big way" to develop the two sectors, he said. Hailing the contributions of Mr. Goswami, a former director of the National Academy of Agricultural Research Management, Hyderabad, Mr. Naidu recalled his association with leading agricultural scientist M. S. Swaminathan in Rajya Sabha.

Referring to Prof. Swaminathan as a "rishi in krishi" and his "enlightening speeches", the Union Minister said debates in the Parliament were a rarity nowadays. "It is either talkout or walkout," he remarked.

Mr. Goswami, who has over 37 years of research and teaching experience in the field of animal genetics and embryo biotechnology, said he accepted the award with all humility.

Andhra Pradesh Agriculture Minister Prathipati Pula Rao said Centre and States should work together to encourage farmers and develop rural areas.

e-portal for farmers launched

Farmers of Andhra Pradesh now have access to www.meerythubazaar.com, an e-portal exclusively for the benefit of farmers. The portal, which was formally unveiled by Information Technology Minister Palle Raghunatha Reddy here on Saturday, is an electronic trading platform that provides a direct interface between buyers and sellers among farmers. The product here is not only the agricultural produce, but also the tools and implements, cattle, fertilisers, pesticides, seeds, lease of mango orchards and anything related to farming. The idea is simple. Just like any other online portal, the farmers will have to just click the product on his mobile and upload the picture. Interested buyers will directly contact the seller, thus eliminating the role of middlemen. The portal was developed by Soft Town.

DOORDARSHAN



सत्यम् जिवम् सुन्दरम्

DD KISAN LIKELY TO BE READY FOR LAUNCH BY JANUARY Doordarshan's 'Kisan TV' channel, which would air programmes on agriculture for farmers, is likely to be ready for launch by mid-January next year.

Senior officials told PTI that the national broadcaster has set itself the "internal target" to ready the new 24-hour channel by the middle of January.

Doordarshan's 'Kisan' channel is one of the new ideas that the Narendra Modi-led NDA government had announced with regard to the public broadcaster.

Earlier in the year, Finance minister Arun Jaitley, who now also holds charge of the I&B ministry, had in his Union Budget 2014 speech, announced a new 24-hour TV channel for farmers that will be dedicated to the agriculture sector, with an outlay of Rs 100 crore.

Farmer Friends lend a helping hand to farmers

To spread the latest technology in agriculture, allied sectors

Department of Agriculture has drawn up an ambitious scheme to disseminate the latest agriculture technologies, educate the farmers on the right choice of crops, develop fallow lands and provide farm support services, involving Farmer Friends in the district.

The 262 Farmer Friends, who had been supporting the farmers for the last two years, donning the role of extension officers, were given capacity building training recently to take up revised submission on agriculture extension under the Centre's Nation Mission on Agriculture Extension Technology. Detailing the mission, Joint Director of Agriculture R. Ganesan, who is also the project officer of Agriculture Technology Management Agency, and K. Srinivasan, Agriculture Officer, Farmers Training Centre and Nodal Officer for ATMA, said the Farmer Friends would not only act as extension officers but function as tools for spreading the latest technology in agriculture and allied sectors.

They would help fellow farmers in capacity building, increase cropping area, teach them the latest technologies available for cultivating red gram transplantation, sugarcane, motivate the farmers to go for farm ponds and help them develop fallow lands and remove prosopis juliflora (karuvelam), they said.

On the instructions of District Collector V. Rajaraman, the department submitted a proposal to the government to increase the area of crop cultivation by developing 1,000 hectares of fallow lands and remove 'karuvelam' trees on about 1,000 acres in Tirupuvanam, Manamadurai, Tirupattur and Ilayangudi blocks, they said. "We propose to increase the area of crop cultivation by 20 per cent in the coming years," they said.

Farmer Friends would be divided into groups, with each group taking care of farmers in three blocks in the district. The entire district had been divided into four zones – Manamadurai, Devakottai, KVK Kundrakudi and Sivaganga – for the purpose, they said.

They would also motivate farmers to dig ponds. So far, 310 farm ponds had been dug in the district and all of them were brimming with water, while 700 more ponds would be dug in coming months. Presently, food grains such paddy, millets and pulses were cultivated on 75,000 hectares in the district and the cropping area would be increased to 99,000 hectares. Besides, sugarcane was cultivated on 3,300 hectares and groundnut on 4,000 hectares, the officials added.

Post-vaccinal sero-surveillance carried out to assess potency of FMD vaccine

Post-vaccinal sero-surveillance to determine the potency of Foot and Mouth Disease vaccine has been carried out in the district, according to official sources.

Potency tests were carried out through random checks of serums. During September, the Animal Husbandry Department immunised 3.73 heads of cattle, 60 per cent of them milch animals, with the vaccine over a 21-day period.

Farmers and animal rearers got their cattle vaccinated without fail since insurance companies do not entertain claims for cows dying of FMD. The question of insurance settlement arises only if the cow dies of factors such as flood, electric shock, accident, and sudden death due to snake bite and feed poison.

As per official records, 29 cows died last year due to the disease, and no compensation was awarded.

Since the Department immunises cattle once in six months, the insurance company fixes responsibility on the farmers.

This time around, the Department provided identity cards with validity for two-and-a-half years to the cattle owners so that the continuity of vaccination could be determined easily.

Meanwhile, taking note of media reports about quality of vaccines for animals to control FMD, the Union Ministry of Agriculture ordered notices last week to three companies involved in manufacturing and supply of FMD vaccine.

A sterility test on the samples of the FMD vaccine batches used by National Institute of Animal Health and Indian Veterinary Research Institute, Bengaluru, will shortly be conducted as per the Ministry's order. Fresh samples will also be drawn from all FMD vaccine manufacturers for testing, according to a Press Information Bureau report.

Potency tests were carried out through random checks of serums

'Food Fair' celebrated

Home Science College and Research Institute on the Agricultural College and Research Institute campus here celebrated 'Food Fair 2014' in commemoration of World Food Day and World Diabetes Day.

G. Pushpa, Dean, Home Science College and Research Institute, said there was a need to reorient work and research with additional focus on family farming, better productivity and consuming healthy foods.

Chief guest T.N. Balamohan, Dean, Horticultural College and Research Institute, Periyakulam, spoke.

KAU to go paperless

Claims to be country's first varsity to have a comprehensive egovernance module

The Kerala Agricultural University (KAU) will have a comprehensive e-governance module. It claims to be the first university in the country to have so. Vice-Chancellor P. Rajendran will launch the module, 'University Suite', developed in association with the National Informatics Centre (NIC).

The University Suite included sub-modules such as electronic file flow, Academic Management System and HR& Pay Roll system, said P.V. Balachandran, Registrar.

"We have already implemented Financial Accounting System, Pension Administration System, Legal Administration System, Sales Administration & Information Management and Online Research Management Information System as part of our Enterprise Resource Planning (ERP) project. With the launching of University Suite, all our activities will be e-governed. This will help all stakeholders and ensure better coordination and implementation of programmes," he added.

Electronic file flow, the most important sub-module in University Suite, virtually transforms the university office to a paperless system. All files will be electronically processed. It also enables officers to identify the status and point of action of a file and access the file even when they are away from office. If an officer is on leave, the higher authority may retrieve the file and take immediate decision.

The other sub-module of University Suite is HR & Payroll, which enables centralised disbursement of salary and allied activities. Academic Management System (AMS), meant for academic activities and its management, helps students pay fee through Internet banking and view records of their academic performance. External agencies may verify through AMS the authenticity of certificates issued by the KAU.

M. Viswanathan Nair, System Manager who heads the IT team that manages e-governance, said that the specialty of ERP architecture was that it enabled all the modules to work independently and simultaneously, combine and integrate with other modules. The KAU headquarters has been Wi-Fi enabled to ensure smooth functioning of the suite. Wi-fi connectivity will be made available throughout main campus soon.

Claims to be country's first varsity to have a comprehensive e-governance module

Paddy cultivation launched in Chithira Kayal fields

Move will usher in rejuvenation of agricultural sector

: Deputy Chairman of the Rajya Sabha, P.J. Kurien, formally launched the cultivation in the Chithira Kayal paddy fields in the Kainakary gram a panchayat on Sunday.

Speaking on the occasion, Mr. Kurien said that the revival of farming in the area after a period of nearly two decades will usher in a rejuvenation of the agriculture sector in Kuttanad. The efforts that have been made will also propagate a belief that farming can

never be abandoned, irrespective of the adversities faced in the endeavour.

He also said that the difficulties faced in launching cultivation in suitable areas despite the advancement of scientific knowledge did not auger well for the development of the society. Sincere efforts must be made in ensuring that no farm land remained fallow and every possibilities of agriculture were exploited for betterment.

He pointed out that the 'Kayal Raja' Muricken, the late social worker, has battled several odds to transform Kuttanad into the 'rice bowl of Kerala'.

Launching a vegetable cultivation scheme in the field, Kodikunnil Suresh, MP, called for the constitution of a special authority to streamline the various development activities in Kuttanad and also coordinate the efforts of various departments.

Officials must be deputed on a permanent basis under the regulatory agency. He also said that he would demand the Central government to transform the Chithira Kayal field into a seed development centre.

The Bharat Sanchar Nigam Limited would be urged to establish a mobile tower for better network connectivity in the region.

Thomas Chandy, MLA, presided over the function. District Collector N. Padmakumar launched a coconut cultivation scheme in the field by planting a sapling. Sub-collector D. Balamurali, A.A. Shukoor, ex-MLA; Champakulam block panchayat president Moncy Sony, Kainakary grama panchayat president S. Sudhimon, Rani paddy cluster president A.D. Kunjachan, Chithira paddy cluster president V. Mohandas and secretary Jose John Venganthara also spoke.

Price of areca recovers slightly after slump in first week of Nov.



There has been a slight recovery in the price of arecanut by the end of the second week of November, bringing cheer to farmers.

Owing to the government's proposal to impose a ban on the production and sale of chewing tobacco, the price of arecanut had declined by around 35 percent in a span of five days in the first week of November. The price of 'hosarashi' variety of arecanut, which was at Rs. 350 a kg on November 3, had come down to Rs. 230 a kg by November 8.

Harsh Vardhan, the then Union Minister for Health and Family Welfare, had written to all State governments to impose a ban on chewing tobacco.

Acting on this letter, the Department of Health and Family Welfare in the State had prepared a Cabinet note seeking permission from the State government for the ban. As a major chunk of arecanut is consumed with tobacco, its price had crashed owing to these developments.

Owing to the price crash, the farmers had shown reluctance to sell the arecanut they had harvested, resulting in a decline in the flow of produce to the market.

Intense buying

According to sources in the market, as stocks with firms engaged in the manufacture of supari products also began to get exhausted, they started purchasing produce from traders here. Due to intense buying activities, prices started to recover from November 12 and maintained the upward movement till the end of the week. The price rose to Rs. 250 per kg on November 12. Prices further rose to Rs. 270 on November 14 and reached Rs. 310 the next day.

D.M. Shankarappa, an arecanut merchant with the Shivamogga Agricultural Produces Marketing Committee (APMC) told *The Hindu* that, as arecanut fetched good prices last year, growers are in better economic position now.

When prices crashed this year, they had not sold produce in panic. Moreover, they can avail mortgage loans from cooperative societies also meet the immediate financial needs. All these factors have increased the bargaining power of farmers due to which prices have started to recover. The present price is likely to rule steady for another 15 days and there will be further escalation later, he said.

Ups and downs Prices at start of month November 3: Rs. 350 a kg November 8: Rs. 230 Price this week November 12: Rs. 250 a kg November 14: Rs. 270 November 15: Rs. 310 Price fell due to government's proposal to ban production and sale of chewing tobacco pundits. According to as stocks with supari manufacturers got exhausted, they started purchasing produce from traders, leading to rise in prices

School on the move for Odisha farmers

: The sight of pastoralists and marginal farmers listening attentively to a senior scientist in sprawling pastures or village community halls may appear strange to many.

But in Odisha's rural hinterland, 'Pathe Paathshaalaa'— a school on the move for farmers — is creating the buzz on how laboratory wisdom is transferred to farmers involved in agriculture, fishery and livestock farming.

Balaram Sahu, a senior veterinary scientist, mooted the idea and has been single-handedly putting this concept into action for the last six years.

"At present, training classes for farmers are conducted by different agencies, including government institutions, on different livelihood options like agriculture, fisheries, and livestock keeping. These training sessions are mostly conducted in cities with jargon in English that many of the poor farmers are not very comfortable with," said Dr. Sahu, who is research officer at Odisha Biological Products Institute.

"So we thought why cannot we go to places where the farmers stay and interact with them in an environment in which they are comfortable. The journey of Pathe Paathshaalaa commenced at Dalibati village in Ganjam district in 2008 when 33 goat-keepers were taught the nuances of raising goats."

In the journey of six years, more than 350 classes have been conducted in different parts of Odisha. From Maoist-affected Nuapada district to the cyclone-hit Ganjam district and from migration-prone Bolangir to coastal Kendrapara district, Pathe Paathshaalaa has stirred the curiosity of farmers and expanded their knowledge of farm practices. It has imparted training to more than 6000 farmers on low input, sustainable livestock rearing and agriculture at their doorsteps.

Speaking to *The Hindu*, Bishnupada Sethi, Secretary of State Fisheries and Animal Resources Development, who mentored the effort, said, "This is a pioneering effort to reach out to farmers. The extension programmes in the country are often found to be halfhearted efforts. But making farmers skilful in their backyard is something which should be applauded."

• The programme has imparted training to 6000 farmers on low input based sustainable livestock rearing and agriculture

• From Maoist-affected Nuapada district to Phailin and migration-prone Bolangir, it has expanded farmers' knowledge

Farmers are trained on different livelihood options — agriculture, fisheries, and livestock keeping

Krishi Mela attracts good crowd

Krishi Mela - 2014, an annual expo of agricultural and allied technologies, organised by University of Agricultural Science, Raichur (UAS-R) at its main campus attracted huge crowd of farmers, students and agricultural enthusiasts on the second day of the event on Saturday. Police and university volunteers found it difficult to manage the crowd in the morning.

While around 10,000 people participated in the event on the first day, around 20,000 people thronged on the second day. The number is expected to double on Sunday given the holiday. People's response to the event was relatively better as compared to last year's event.

Minister of State for Agriculture Krishna Byre Gowda, Member of Parliament representing Raichur constituency B.V. Naik, Raichur MLA Dr. Shivaraj Patil, Manvi MLA Hampaiah Naik, MLC Boseraju, Deputy Commissioner Sasikanth S. Senthil and Zilla Panchayat Chief Executive Officer Vijaya V. Jyothsna were among the dignitaries that took part in the Saturday' event.

Dollu Kunitha and other cultural performances were special attractions of the day. University students sang songs hailing altruistic approach, hard-work and sacrifices of farmers.

Six male farmers and six female farmers, a man and a woman form each district of Hyderabad Karnataka, who have made significant achievements in agriculture and allied fields, felicitated and conferred 'Shreshtha Krishika' (man) and 'Shreshtha Krishimahile' (woman) on the occasion.

A farmers-handbook consisting 16 articles that separately discuss various agricultural related issues which farmers encounter in their day-to-day farming activities was released on the occasion. Some farmers were symbolically provided with Soil Health Cards which contain complete information about the nutrient condition of their soil and enable them to determine on additional nutrients to be given for improving the soil health.

The interactive session where farmers share their experiences in the presence of agricultural scientists and experts was well attended by farmers. The stalls that exhibited agricultural and allied technologies, agricultural inputs, livestock and others were heavily crowded. The stalls where agricultural and allied outputs were put on sale were also doing well.

Banana crops in Chitradurga district reel under pest attack

Banana crops on more than 150 hectares in Chitradurga district are bearing the brunt of an attack by Banana Skipper (Erionota thrax) and officials of the Department of Horticulture have advised growers to destroy the affected leaves of the plants. The problem is severe in Hiriyur and Hosadurga taluks.

Devaraj, Deputy Director of Horticulture, said the Banana Skipper butterfly came from South East Asia, where their larvae cause major damage to infested plants. It is also known as the banana leaf roller.

After hatching, the caterpillars move towards the outer edge of the leaf where they feed and roll the leaf to make a shelter. Within the roll the larva secretes a protective, white, waxy covering.

The feeding and rolling destroys the leaves, significantly reducing the plant's leaf area and leading to reduced fruit production, as well as preventing the use of the leaves for traditional purposes. Banana skipper was particularly devastating to banana crops in Papua New Guinea in the 1980s. However, the release of a biological control agent (larval parasitoid) in 1990 has significantly reduced the effects of this pest, he added.

Banana skipper is currently widespread in South East Asia, and is also found in Papua New Guinea, Mauritius, Guam and Hawaii. In Karnataka, the symptoms of the disease were noticed in some parts of Dakshina Kannada, Udupi and Kodagu districts. To avoid further spread of the disease, the growers should keep frequent watch on the crop and in case of any symptom, they should remove the affected portion and destroy it. The growers can stop spread of the disease by sprinkling a 1 ml dichlorvos chemical with one litre of water, he added.

-While planting the new saplings, the growers should take all precautionary measures and thoroughly check the plants, he added.

Barrages across Coleroon river in tailend of delta region remain a mirage

Government yet to begin work on 7 utilities across the Coleroon

Pleas to build barrages across the Coleroon to conserve surplus water in the tailend area of delta basin have been growing shriller in Nagapattinam district, which recorded about 35 per cent excess rainfall in October.

About 20 tmcft. of surplus rainwater are said to be draining into the sea from the Coleroon in the absence of any barrage. Although the government had announced in the Legislative Assembly that seven barrages across the Coleroon would be built near Kumaramangalam village in Mayiladuturai taluk under the 'Accelerated Irrigation Benefit Programme,' the programme is yet to take off. Officials of the Public Works Department maintain that feasibility studies were on.

All India Kisan Sabha district secretary V. Subramanian, while emphasising the need for building barrages across the river, told *The Hindu* that the people of Mayiladuturai and the surrounding areas were solely dependent on the Kollidam Comprehensive Drinking Water Supply Scheme for drinking and domestic water purposes. People of Vedaranyam and the surrounding areas were also dependent on the scheme.

Crops on over 20,000 acres are dependent on borewells because of uncertainty in water availability.

During summer, there is high demand for water, both for irrigation and domestic requirements.

Tamil Nadu Consumer Protection Council district president S. Bashyam said the construction of barrages across the Coleroon near Kumaramangalam village would approximately save at least one tmcft. of water, which in turn, could be used to meet the drinking water needs of Mayiladuturai and Kumbakonam.

Though Rs. 400 crore was earmarked, including a Central assistance of Rs. 100 crore, under the Accelerated Irrigation Benefit Programme, the officials concerned were yet to initiate preliminary works for the project, Mr. Bashyam alleged.

A large quantum of rainwater was let into the sea and this could be harnessed for drinking and irrigation purposes.

Inundation of fields during the monsoon could be prevented through better regulation with the construction of barrages, say a cross-section of farmers.

But according to sources in the PWD, the Coleroon is a major flood carrier and the construction of barrages without proper studies might cause inundation.

Hence it would take sometime to carry out proper feasibility studies before the implementation of this project.

The government, as per suggestions from farmers and the Central Water and Power Consulting Agency had constructed tailend barrages across the Thirumalairayan river, Pravadirayaru, Arasalar, Nattar, Nandalar, Vanchiyar, and Noolar in the Karaikal region.

This initiative had benefited a section of farmers throughout the year, said the secretary of the Karaikal circle committee of the Communist Party of India (Marxist) A. Vincent.

· Irrigation remains a concern despite 35 p.c. surplus rainfall in October

• Huge quantum of water said to be draining into the sea from the Coleroon

Farmers seek discharge of waters to save paddy

Farmers in the tail-end of the Kallanai Kalvai ayacut have urged the district administration to take steps for the continued discharge of waters from the Mettur, considering the fact that the district in general and the coastal blocks in particular have not realised the normal quantum of water during the current monsoon. Referring to the suspension of the release of waters from the Mettur in the recent few days, M. Madhavan, District secretary of the Tamil Nadu Vivasayigal Sangam, said although farmers of Kallanai Kalvai ayacut, pinning hopes on the timely onset of monsoon, had raised the "samba" crop, their hopes had been belied. The suspension of the discharge from Mettur has come as a severe blow to them, he said. He pointed out that the suspension was effected based on the copious realisation of waters in Nagapattinam and Tiruvarur districts. On the other hand, the realisation in Pudukottai district was far below normal, he said.

Crop loan: over Rs. 1,300 crore given in three years

Minister inaugurates All India Cooperative Week celebration

As many as 3, 08,353 farmers have received crop loan to the tune of Rs. 1,383 crore in the past three years in the district.

Speaking at the inauguration of 61s{+t}All India Cooperative Week celebrations here on Saturday, Minister for Highways and Minor Ports Edappadi K. Palaniswami said that 19,800 farmers were provided loan of Rs. 106.44 crore for purchasing agricultural gadgets and Rs. 125.05 crore was provided as loan to members of women self-help groups. He said that 19 Amma pharmacies were functioning in the district and has recorded sales to the tune of Rs. 23.50 crore. "The cooperative societies in the district have received total deposits of Rs. 16,645.40 crore", he added. Highlighting the various facilities created for cooperative societies, he said that core banking solutions would pave way for better service to the people.

District Collector K. Maharabushanam, R. Elangovan, president, Tamil Nadu State Apex Cooperative Bank Limited, and S. Srinivasan, Cooperative Unions Joint Registrar, Salem Zone, also spoke. Beneficiaries received assistance to the tune of Rs. 1.48 crore during the celebrations. Mayor S. Soundappan, MPs and MLAs participated.

In Namakkal, Minister for Industries P. Thangamani inaugurated the celebrations in Tiruchengode in the presence of District Collector V. Dakshinamoorthy, P.R. Sundaram MP, MLAs and others.

The Minister distributed assistance to 158 beneficiaries to the tune of Rs. 2.18 crore during the celebrations. Cultural programmes were also held.

Core banking solutions will pave way for better service to the people, says Minister

Soil Health Cards for all farmers in three years: Minister

'It will be done at a cost of Rs. 100 crore'



Minister of State for Agriculture Krishna Byre Gowda looking at a machine at Krishi Mela – 2014 in Raichur on Saturday.— PHOTO: SANTOSH SAGAR

Minister of State for Agriculture Krishna Byre Gowda has announced that Soil Health Cards would be provided to all farmers in the State within the next three years. He was speaking at Krishi Mela - 2014, organised by University of Agricultural Sciences, Raichur (UAS-R) on its main campus here on Saturday. He said the card would enable farmers to know the condition of the soil in their fields and determine additional nutrients to be given, so as to improve its overall health keeping in mind the specific crop to be grown.

"A majority of farmers don't know what additional nutrients the soil in their lands need. They simply apply more fertilizers. This would sometimes not only spoil the soil health, but also result in low yield. The Agriculture Department officials will visit each and every field in the State, test the soil and give Soil Health Cards to the landowners," he said. The Minister said his department had already initiated the process and is hoping to complete it within three years. "It will cost around Rs. 100 crore," he added.

Machines on rent

The Minister said his department was rigorously working to put a mechanism in place to provide agricultural equipment and machinery to farmers on rent at much cheaper rates as compared to market rates. "We are going to establish hundreds of equipment centres in the rural areas across the State under public-private partnership (PPP). Each centre would cost Rs. 75 lakh, of which government would bear Rs. 50 lakh and private agencies would take care of remaining amount," he said.

The Minister called upon government servants in his department and agricultural scientists in universities to direct themselves to rural areas and mingle with farmers.

"Go to the fields with farmers, know their problems practically, come back to universities to research on the issues you find in the fields and go back to fields again with solution. The purpose of establishing an agriculture department and agricultural universities would only be served through such a farmer-centric and farmer-oriented approach," he said.

Doppler radar to benefit 8 districts soon

The Doppler radar to be commissioned at the Karaikal cyclone detection centre will help farmers and fishermen of eight districts.

The final phase of installing the state-of-the-art radar, which will help in enhanced weather forecasting, is nearing completion.

Specialised crane from Chennai

Sources in the Meteorological Department said a specialised crane from Chennai would hoist the 15-tonne equipment and place atop the 12-metre-high building.

The process would be completed by December.

The radar will be able to predict weather in 150 km, almost accurately, benefitting Cuddalore, Nagapattinam, Tiruvarur, Thanjavur and Pudukottai, among other districts.

P.S. Biju, station director of the centre, said the lifting of the radar and its components was crucial to the success of the mission. Once the radar was placed atop the station, assembling its components would begin. The installation process would be supervised by scientists from China and the United States.

The radar has been designed by the American aerospace major, Lockheed Martin, and was fabricated by a firm in China. The radar is expected to operate from January.

Tobacco growers for dialogue with government

Farmers in Prakasam district, which accounts for than 50 per cent of tobacco production in the State, are demanding a sustainable economic alternative while implementing the decisions taken at the sixth session of the Conference of Parties (COP6) to the WHO Framework Convention on Tobacco Control (FCTC) in Moscow last month.

"We have no objection to COP6's tobacco consumption reduction strategies like imposition of higher taxes on tobacco products and introduction of non-nicotine cigarettes," said a farmers' group coming under the Ongole I auction platform. "But, the government should show us first a viable economic alternative before going ahead with tobacco consumption reduction strategies," they said. A formal mechanism should be created for farmers to articulate their concerns. No policy decision that adversely affects their livelihood should be taken. Tobacco reduction strategies like imposition of hefty taxes will not solve our problem. The government should explore alternative uses of tobacco such as in pain-killers or bio-pesticides," Virginia Tobacco Growers Welfare Association president Ch. Seshaiah said.

"The government should involve growers in a constructive dialogue to have a better understanding of the problems facing tobacco growers and evolve workable solutions to the challenges ahead," said Ch. Ranga Rao, member, Tobacco Board.

A meeting of farmers from various auction platforms will be convened to take stock of the situation arising out of the FCTC meet, said former Tobacco Board member P. Bhadri Reddy.



The Indira Gandhi Centre for Advanced Research in Livestock (IGCARL), the only one of its kind in the country, set up at Pulivendula in Kadapa district in 2009 on a sprawling area of 657 acres with an outlay of Rs. 386 crore is presenting a picture of neglect.

Inaugurating the IGCARL research block on January 25, 2009, former Chief Minister Y.S. Rajasekhara Reddy had promised to develop it into a world-class research institute that would generate employment for 750 persons and indirect employment for 1,000 more. The hopes of farmers who had parted with their lands expecting that their kin would get employment have been belied.

Besides, testing and certification of milk, meat and eggs for pesticides and antibiotic residues and composition for export purposes were proposed. Research on nano-biology, molecular genetics, cytogenetics, cryobiology, microbiology and immunology and animal nutrition to develop vaccines to improve animal health and productivity was another objective of the centre.

SEZ set up

A special economic zone was set up at IGCARL on public-private partnership (PPP) basis. The centre also entered into an understanding with Dodla Diary, which offered to invest Rs. 100 crore on research and development. And, the subsequent development was that Dodla Dairy began raising its milch cattle in the livestock complex.

The centre received no attention from successive governments or the official machinery after YSR's demise. Hopes were rekindled after an NRI, Polavarapu Ratnagiri, the chief executive officer of US-based Genomics Biotech, recently inspected the centre. He set the ball rolling by apprising the Department of Biotechnology (DBT) that the centre had basic amenities but faced resource crunch and attention.

A DBT biotechnologist, S.R. Rao, is expected to inspect the centre on November 17 and forward a comprehensive report to the Union government. Ph.D. scholars will get an opportunity to conduct research at the centre if the DBT sanctions funds, according to deputy CEO of IGCARL K.D. Prasad.

Plan to increase onion production

It has been planned to increase Bellary onion cultivation in this district during 2014-15.

It will be taken up on 125 acres. Collector A. Saravanavelraj distributed Bellary onion seeds to 58 farmers at subsidised rate on

Sunday. At 50 per cent subsidy, seeds worth Rs.6 lakh were distributed at the rate of Rs.12,000 per hectare. The seeds were distributed under National Horticulture Mission which has proposed to increase Bellary onion cultivation in 10 districts during 2014-15.

Demonstration staged to seek drinking water

A large number of people from various walks of life and farmers participated in a demonstration in Mettur on Sunday to press for regular supply of potable drinking water to the people of the villages in Mettur Assembly constituency and to press other demands.

They demanded implementation of a scheme for supplying Cauvery water to all the tanks, ponds and lakes in Mettur and surrounding areas. They also demanded implementation of the Dhonimaduvu Scheme in Kolathur union.

S. R. Parthiban, Desiya Murpokku Dravida Kazhagam (DMDK) MLA, led the agitation held in front of the dam.

He said that drinking water scarcity was prevailing in many villages surrounding Mettur Dam. The people who gave their lands for the construction of the dam were at present facing water scarcity.

Priority

He said that the government, at the time of construction of the dam, assured to give priority to solve the water needs of the people of Mettur and the neighbouring villages. But, the promise was not fulfilled.

Much of the water released from Mettur at the time of monsoon goes waste into sea, but the State Government has turned a blind eye to the same.

He urged the government to implement schemes for the benefit of Mettur constituency without any delay.

A large number of women participated in the agitation displaying empty pots.

World Fisheries Day celebrations

: Kerala University of Fisheries and Ocean Studies will organise a fishermen's meet on November 21 as part of World Fisheries Day celebrations.

The occasion will also be used to honour the best of traditional fishermen, fish farmers, fisheries planners, fisheries students and educationists. A seminar and exhibition on the fisheries sector as well as a rally, with the theme conservation of fisheries resources for protection of the human kind, too are part of the day's celebrations, said a press release from Kufos here.

Farmers celebrate increase in Periyar level

Farmers in Theni and Madurai districts celebrated the sharp increase in storage level in Periyar dam to 141 feet at tourists' boat boarding point in Thekkadi near here on Sunday. Farmers sprinkled flowers on the water near the boat point.

Later, another group of farmers prepared pongal on the campus of Penny Cuick Manimandapam near Lower Camp. Meanwhile, a team of Public Works Department officials camped at the dam site, monitoring water level, seepage and pressure. At present, Periyar dam has 7.4 tmc of water, spreading over 5,378 acres. Public Works Department sources said the increase in water level would also expose encroachments on the dam site. At present, water has reached the tourist boat boarding point near ticket counter at Thekkadi.

Global warming hiatus over: study

Climate scientists have recorded the highest-ever global sea surface temperatures this year owing to global warming.

The global warming hiatus — the 2000-2013 period when the global ocean surface temperature rise paused — is over and as of April 2014, ocean warming picked up speed again, found the study. "This summer has seen the highest global mean sea surface temperatures ever recorded since their systematic measuring started," said Axel Timmermann, climate scientist at the University of Hawaii. — IANS

\$3-billion boost for U.N. climate fund

A Sino-US breakthrough on curbing carbon emissions proves a global deal on climate change is achievable, U.S. President Barack Obama said Saturday, as campaigners hailed new vibrancy in long-stalled talks.

Announcing a \$3-billion contribution to a U.N.-backed climate change mitigation fund, the American leader said the China-U.S. deal unveiled earlier this week showed the way forward.

"If China and the U.S. can agree on this, then the world can agree on this — we can get this done," he said in a speech on the sidelines of the G20 summit in Brisbane.

The U.N. and green campaigners welcomed the funding pledge, saying it confirmed global warming was now central to the world's political agenda following the surprise deal between Washington and Beijing to reduce their greenhouse emissions.

Climate experts conceded that Republican opposition may see Obama struggle to fulfil his \$3 billion commitment, but said he was fuelling momentum for change in an area where talks have faltered since the historic Kyoto Protocol of 1997.

Obama outlined his pledge to the Green Climate Fund (GCF) at the University of Queensland, drawing applause when he told the audience he wanted to ensure his grandchildren could visit Australia's famed Great Barrier Reef "50 years from now".

He said the fund would help developing nations cope with climaterelated issues such as rising seas while also backing environmentally friendly infrastructure projects.

said.

It was the American leader's most upbeat assessment about climate change since he was elected in 2008 promising to tackle the issue, only to see it relegated amid partisan bickering and economic woes.

His stance stymied efforts by G20 host Tony Abbott — who questions the science of man-made global warming — to reduce the issue to the margins of the Brisbane summit and emphasise economic growth. — AFP



Why snacking on fruits can be harmful

Snacking on unhealthy food in between meals may play havoc to your waistline. While fruits might be a better option for your physique, they may damage your teeth, reveals a survey.

The warning about snacking on sugary fruit comes from a poll of 458 dentists, hygienists and dental professionals. Commissioned by Dentyl Active, the survey explored the foods and habits that are eroding Britain's dental health, reports femalefirst.co.uk.

Four out of five warned that snacking contributes to decay, plaque build-up and enamel erosion, and a third said that apples can cause major damage to teeth and gums – alongside chocolate and biscuits. Experts also warned that fruit juice is a key cause of tooth and gum problems.

Travelling with a smoker increases cancer risk

While simply sitting in cars with people who smoke, non-smokers breathe in a host of potentially dangerous compounds that are associated with cancer, heart disease and lung disease, says a new research.

In a small yet significant study, 14 non-smokers sat for one hour in the passenger seat of a parked sport utility vehicle behind a smoker in the driver's seat.

The non-smokers showed elevated levels of butadiene, acrylonitrile, benzene, methylating agents and ethylene oxide (carcinogens and other toxins) in their urine.

This group of toxic chemicals is "thought to be the most important among the thousands in tobacco smoke that cause smokingrelated disease", said senior investigator Neal Benowitz, professor at the University of California, San Francisco (UCSF) in the US. "This is the first study to measure exposure to these particular chemicals in people exposed to second-hand smoke," Benowitz added.

"This tells us that people, especially children and adults with preexisting health conditions such as asthma or a history of heart disease, should be protected from second-hand smoke exposure in cars," lead author Gideon St. Helen from UCSF said.

The study appeared in the journal Cancer, Epidemiology, Biomarkers & Prevention.

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THE TIMES OF INDIA

Why women suffer from depression more than men

Women are more likely to suffer from depression and anxietyrelated disorders because the sex hormone oestrogen drives more blood to the heads of young women compared to men

It is during puberty that the gender difference may originate, a significant study indicated.

"These results may have important implications for neuropsychiatric disorders with adolescent onset and strong gender disparities such as mood disorders, anxiety disorders and schizophrenia," said Theodore Satterthwaite, a professor at University of Pennsylvania.

In general, females have a higher prevalence of anxiety and depression and in males higher prevalence of schizophrenia, Satterthwaite explained.

For the study, researchers used magnetic resonance imaging (MRI) scans to analyse the development of brain blood flow in 922 young people between ages eight and 22 to find out when such sex changes emerge.

The study found the areas of a girl's brain that saw the highest increase in blood flow was that which deals with emotions and controls social situations.

"The parts of the brain that saw the highest difference of blood flow were in parts of the brain associated with higher cognitive functions," Satterthwaite added.

The study appeared in the journal *Proceedings of the National Academy of Sciences*

Healthy lifestyle can undo heart damage

The heart, it seems, is more forgiving than you may think -especially to young adults who try to take charge of their health. Researcher have found that picking up healthy habits in the 30s and 40s can slash heart disease risk.

When people in their 30s and 40s decide to drop habits that are harmful to their heart and embrace healthy lifestyle changes, they can control and potentially even reverse the natural progression of coronary artery disease, the findings showed.

"It is not too late," said Bonnie Spring, professor of preventive medicine at Feinberg School of Medicine, Northwestern University in the US.

"You are not doomed if you have hit young adulthood and acquired some bad habits. You can still make a change and it will have a benefit for your heart," Spring added.

For the study, researchers examined healthy lifestyle behaviours and coronary artery calcification and thickening among the more than 5,000 participants in the Coronary Artery Risk Development in Young Adults (CARDIA) study who were assessed at baseline (when participants were aged 18-30) and 20 years later.

The healthy lifestyle factors assessed were: not being overweight/obese, being a non-smoker and physically active and having low alcohol intake and a healthy diet.

Each increase in healthy lifestyle factors was associated with reduced odds of detectable coronary artery calcification and lower intima-media thickness -- two major markers of cardiovascular disease that can predict future cardiovascular events.

On the flip side, scientists also found that if people drop healthy habits or pick up more bad habits as they age, there is measurable, detrimental impact on their coronary arteries.

The study appeared in the journal Circulation.

Health benefits of soaking up some sun

This time of the year, in winter, it feels good to have the warm sun on our bare skin. While most of us are aware of the dangers of too much sun, sunlight confers enormous health benefits as well.

Sunlight may help prevent cancer

It's not just plants that metabolize sunlight. Humans do too. Through a complex process, our bodies turn sunlight into lifegiving vitamin D and apparently, there is a connection between cancer and Vitamin D deficiency. Research indicates that being deficient in vitamin D increases the risk of many cancers, especially breast and colon.

Sunlight reduces blood pressure and risk of cardiovascular disease

Avoiding excess sunlight exposure is critical to prevent skin cancer but not being exposed to it at all as a result of a certain lifestyle could increase the risk of cardiovascular disease

Sunlight is beneficial for Alzheimer's patients

Clinical research has shown that exposure to full-spectrum light throughout the day coupled with darkness at night can help improve some aspects of Alzheimer's disease—reducing agitation, increasing sleep efficiency, decreasing night time wakefulness, and decreasing night time activity in these patients.

Sunlight may lower risk for multiple sclerosis

Multiple Scherosis is more common in populations that live farther from the equator according to experts. People who move from a low-risk area to a high-risk area before the age of 15 acquire a higher risk of developing the disease, whereas those who make the same move after adolescence retain a lower risk, say researchers. These observations suggest that environmental exposure, and in particular, early sunlight exposure (which is correlated with vitamin D levels) in the first two decades.

7 health benefits of broccoli

Broccoli is known to be hearty and tasty vegetable which is rich in dozens of nutrients. It is said to pack the most nutritional punch of any vegetable.

Here are some of the benefits of broccoli:

1.Cancer prevention: Broccoli shares these cancer fighting, immune boosting properties with other cruciferous vegetables such as cauliflower, Brussels sprouts and cabbage.

2. Cholesterol reduction: Like many whole foods, broccoli is packed with soluble fiber that draws cholesterol out of your body.

3. Reducing allergic reaction and inflammation: Research has shown the ability of kaempferol to lessen the impact of allergy-related substances on our body. Broccoli even has significant amounts of omega 3 fatty acids, which are well know as an anti-inflammatory.

4. Powerful antioxidant: Of all the cruciferous vegetables, broccoli stands out as the most concentrated source of vitamin C, plus the flavonoids necessary for vitamin C to recycle effectively. Also concentrated in broccoli are the carotenoids lutein, zeaxanthin and beta-carotene, other powerful antioxidants.

5. Bone health: Broccoli contains high levels of both calcium and vitamin K, both of which are important for bone health and prevention of osteoporosis.

6. Heart health: The anti-inflammatory properties of sulforaphane, one of the isothiocyanates (ITCs) in broccoli, may be able to prevent (or even reverse) some of the damage to blood vessel linings that can be caused by inflammation due to chronic blood sugar problems.

7. Diet aid: Broccoli is a good carb and is high in fiber, which aids in digestion, prevents constipation, maintains low blood sugar, and curbs overeating.

Furthermore, a cup of broccoli has as much protein as a cup of rice or corn with half the calories.

Sprouts: A storehouse of vitality

Sprouts are the 'shooting' stars of the gastrosphere, with health specialists sprouting everything from grains and seeds to pulses! Here's why it makes sense to include them in your diet:

SUPER GRUB

Sprouts are effectively living foods and one of the richest forms of nutrients known."People sprout their food to boost its nutritional content. Generally, sprouts are rich sources of vitamin C, B, fibre and protein, which are great for boosting the immune system," says nutritionist and food consultant Jia Singh. Sprouts are the perfect plant-based food, which can help us reduce our blood cholesterol levels, which in turn reduce heart strokes and other heart issues. "Sprouts make perfect sense for those watching the waistline, since they are high in insoluble fibre that is crucial for weight loss. Controlled weight will also keep beasts like diabetes, depression and high BP at bay," says health expert Dr Anjali Hooda.

SO MUCH TO SPROUT!

"You've probably heard of bean sprouts or the latest Brussels sprouts but there's so much more that can be sprouted - grains, such as barley and wheat, radish and broccoli seeds, kidney beans, soybean, amaranth and even brown rice," says Singh. Sprouted seeds, pulses and beans are collectively known as `sprouts' and they're big globally right now. Organic food markets across the globe are selling sprouted grain bread, quinoa, as well as sprouted grain flour. But why sprout grains, you might think. Well, sprouted grains aren't allowed to reach their full-grown stage and are picked before the seeds use the starch to grow. So what you get is less starch and more vitamins, minerals, nutrients, and protein! They also contain less gluten and hence, are ideal for people with gluten sensitivity.

BREAK THE MONOTONY

The next time, instead of scowling at sprouts, break the boredom of it all by trying different approaches. You could mix and match various sprouts (lobhia, kidney bean, soybean) and take a break while consuming them. Your body needs to work extra hard to process this raw food, so opt for sprouts once a week or twice maximum.Also, wherever you would use a grain, nut or bean in your cooking, replace it with a sprouted one. If you're going to top your salad with almonds or chickpeas, use sprouted ones instead. Planning on serving rice along with your dinner? Opt for sprouted brown rice or barley.

FOR LUSTROUS HAIR

Who needs an expensive hair spa when a bowl of shooting legumes can do the trick! Sprouts are full of the magical potion carotene (keratin in some cases). Regular consumption of sprouts adds shine, elasticity and lustre to the hair. It contains Omega-3 fatty acids, which are vital for the nourishment of hair follicles. It combats dry and brittle hair, flaky scalp and reverses hair loss. Sprouts also prevent the hair from appearing dull and lifeless. All you have to do is add a crunchy Brussels sprouts salad to your dinner plan. "Apart from being cancer-protective in nature, they are rich in vitamin E, potassium, and iron, all effective constituents for hair growth," tells Dr Hooda. Alfalfa sprouts are also extremely useful for the all-round development of hair.

Are you snacking too much?

If you are munching on that bag of potato chips then think again. Your key to healthy living lies in cutting the junk and eating healthy

It is important to space out the four major meals of the day (breakfast, lunch, snacks and dinner) correctly. Unfortunately, when people feel hunger pangs, they end up satisfying their urges by consuming biscuits, sweets, breads, burgers, all kinds of chavanas (dried snacks). These kind of foods not only make you gain weight but also put burden on your digestive system and resulting in unhealthy living. Follow these rules of snacking and see the difference yourself.

No binging on snacks

Start your morning with a breakfast that's really satisfying—like oats, eggs, or yogurt. You can choose your Indian breakfast like dosa, idli, sambar, upma or moong chilla. Then at lunch, combine healthy carbs, protein, and fat.The trick of healthy living lies in eating healthy meals at regular intervals. If you're starving while you are at work or cooking your meals, munch on cucumbers or carrots but not that bag of chips.

Keep a food (and snack) diary

Keep a log of your daily activities and your food habits. There are chances that when you see your own list of food, you will forced to cut on the junk and concentrate on healthy food.

Energy-sustaining snacks

-Wholegrain cereal with low-fat milk

-A piece of fruit

-Salad with grilled chicken

-A vegetable sandwich with whole wheat bread

-Freshly cut salads

-Dried fruits and nuts like almonds, dates, apricots, figs, walnuts So, control your food urges and opt for healthy snacking.

4 foods you should stop eating right now

Whether you're a diet-conscious person or someone who wants to get into the habit of healthy eating, there are certain foodstuffs you shouldn't touch if you want to achieve your goal of staying fit! We list a few...

Soda

Did you know, soda is loaded with empty calories from high fructose corn syrup? What's more, you should stop drinking soda, because it is known to contribute to obesity and is also likely to increase the risk of diabetes and high-blood pressure in people.

White bread

Made out of maida, white bread is unhealthy because it is, quite literally, bleached! So this process not only rids the bread of its flavour but also of all its essential nutrients. So instead of white bread, opt for a wholesome, whole grain or brown bread for your sandwiches.

Whole dairy

Of course, dairy and dairy products are good for your health, but whole-fat dairy is full of fat and cholesterol. So always choose lowfat dairy and its products, which has all the nutrients you need.

Fast foods

The amount of calories one fast food meal contains is almost equal to the amount of calories one must consume in the entire day! While some of these calories come from protein, most come from the sugar (of the soda) and the fat (usually the burger and fries!) in the food.

Chronicle

Pollution up in Hyderabad post Pollution Control Board split



Pollution up in Hyderabad post Pollution Control Board split

Hyderabad: After the bifurcation of Andhra Pradesh, and the formation of the separate Pollution Control Board, Hyderabad and its surrounding areas have become more prone to the pollution.

This is because the night patrolling system has been stopped. Citing changes and the induction of a new system due to the formation of the Telangana State Pollution Control Board, the night patrolling system has been stopped and a new proposal for a rolling task force was proposed. However, nothing seems to have materialised as a result of which polluting industries are not being monitored.

"The proposed rolling task force is yet to be manned by staff scientists, technicians and guards. The schedule is also yet to be assigned. However, there is a shortage of staff and hence night patrolling has not started," said an official with TSPCB.

The night patrolling system plays a key role in monitoring violations. Whenever complaints about industries releasing effluents or any other pollution causing practices are received, the task force raids those places. It collects samples of effluents and conduct tests and sends the reports to the regional and head offices.

P. Ramesh Chandra, former environmental scientist with the AP Pollution Control Board, said, "Most of the deliberate violations by the polluting industries take place at night. The industries that cause air pollution are found to be manufacturing products more than the permitted limit and lack installed equipments which are capable of filtering pollutants and releasing it in the air.

Similarly, the bulk drug and pharma units are found releasing effluents in nalas and lakes. Some dump hazardous effluents by tankers in far-off areas." The erstwhile task force used to work in two teams. The teams also included technical, scientific experts and two guards. Also, the staff from the regional offices of Hyderabad,

RC Puram and Ranga Reddy, used to take part in the patrolling and address the complaints. Team 'A' used to patrol Kazipally, Gaddipocharam, Bollaram, Patancheru, Pashamailaram, Jeedimetla during the night.

Team 'B' would patrol the Musi river, Nagole bridge to Uppal at night. The task forces also conducted regular monitoring of Jeedimetla Effluent Treatment. Complaints lodged through phone calls were also addressed by these teams. Industries that resort to violations of environmental norms and release the effluents were scared of these task forces.

However, the task force was dissolved following complaints of corruption. As a result, the TSPCB came up with the idea of assigning one different authority on a daily basis rolling system.



Stigma hampers treatment of fits

Epilepsy affects four per cent of the population in India. One in 1,000 people are found to suffer from this disorder

Hyderabad: Epilepsy is the second most common neurological disorder but the social stigma attached to it ma-kes its treatment rather difficult, observe experts.

The stigma is more so for a girl child as the parents are usually depressed and not willing to disclose the fact that their child suffers from the disease or even talk about it.

Speaking to this correspondent a day before the National Epilepsy Day, which will be observed on November 17, Dr S.A. Jabeen, associate professor of neurology at the Nizam's Institute of Medical Sciences, said, "After headaches, epilepsy is the second most common problem in neurology.

But there are effective drugs for its treatment. Surgery is also an option in some patients. But we find that there are too many misconceptions and often the support required for the patient from the family is missing. They need to understand that epilepsy is a disease that can be treated and the patient can lead a normal life."

The prevalence of epilepsy is four per cent in India. One in 1,000 people are found to suffer from epilepsy. The disease burden in terms of frequent seizures is reported about one in 20 people and these can be severe during childhood and old age, but they are minimal during adulthood.

While genes contribute to 10 per cent of the cases, others are due to multiple factors like head injuries, injury during birth, brain trauma and brain fever. There is controlled epilepsy and uncontrolled epilepsy.

Dr Radha Krishna, a senior neuro surgeon said, "In controlled epilepsy, the patient can lead a a normal life. But they have to stick to their medication and also follow simple rules like sleeping well, eating on time and avoiding excessive physical and mental stress."

The uncontrolled stage requires heavy medical intervention, and even surgery in some cases. In India, children are the most commonly affected group. Since this also the growing stage, many children suffer as they are compelled to take breaks in their education. This can also result in low self esteem to the child and parents.

Epilepsy has strong psychological effects and this is harmful as it is detrimental in ensuring the complete and proper treatment of the disease. The patients and their family members need motivation to accept epilepsy as any other disease which can be treated.

Businessine

Sunny days ahead for farmers as agriculture turns to solar power

Chennai, November 16:

If talks between solar companies, agricultural water pumps producers and electricity distribution companies come to fruition, India could see the advent of the 'solar farmer'.

In the last one year, there has been a lot of activity in 'solarisation' of agriculture – enabling farmers to buy solar powered irrigation pumps through various schemes.

In July, the first Budget of the current government in New Delhi allocated Rs. 400 crore to be given to States in support of their 'solar pump' programmes.

The States would provide subsidies to help buy solar pumps, in a bid to reduce supply of free electricity to them.

Several States have come forward with their own solar pump programmes – Rajasthan, Tamil Nadu and Karnataka, to name three of them. Prices are fixed through a bidding process, and typically a certain number of pumps are allocated to each district.

Farmers in the district apply and if more farmers are interested than the number of pumps allocated, buyers are chosen by a draw of lots. The lucky farmers pay 30 per cent of the cost of the pump, the rest is paid to the pump supplier by the State Government. (A 3-hp pump would cost about Rs. 4 lakh.)

And now, there are moves to take this issue a little forward. Why not have the farmers 'oversize' the pumps and enable them to supply the extra electricity generated by the solar panels to the grid?

Pashupathy Gopalan, Head – Asia Pacific, SunEdison, a large USbased solar major that is active in India, says talks are on between manufacturers and authorities to make such a proposition happen.

SunEdison is a major player in the solar pump market and, incidentally, has recently entered into a pact with the Anna University of Chennai to research into how solar pumps-driven irrigation practices could help farmers.

Part of the research is the study of the possibility of change in crops to enable the farmer gets more from his land.

The 'crop plus solar' farmer would get additional revenue from the supply of electricity for, say, 25 years.

Injecting power into the grid at the village-levels would also strengthen the grid, improve voltage, says Pashupathy.

Quoting an estimate that says there are 30 million irrigation pumps in the country, Pashupathy reckons that if all of them are replaced with solar pumps, there could be an additional electricity generation of about 25,000 MW, part of which could be put into the grid.