

## Two more Kerala farmers Receive Plant Genome Saviour awards

Two farmers from Kerala - T. T. Thomas, Kanchiyar, Idukki and Reji Joseph, Agali, Palakkad - nominated by KAU IPR Cell received Plant Genome Saviour Awards (2015) in a function held at Champaran, Bihar on April 19.

With this the persistent presence of Kerala farmers in the annual award instituted by PPV & FR Authority, Government of India remains unbroken. Kerala farmers won the award in every year since inception. Seven Kerala farmers won the award in 2013 and four in 2014.

Seventy Six year old T. T. Thomas is a farmer settled in the Anchurully region of Iduki. He has been maintaining a collection of 15 pepper genotypes along with other crop plants including cardamom, coffee, fruit trees, medicinal

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## CM Calls for Innovative Approach In Agricultural Research

Chief Minister Pinarayi Vijayan called for an innovative approach in agricultural research so that the emerging challenges can be effectively addressed.

He was speaking after inaugurating the Pesticide Residue Analytical laboratory, Guest house, PG laboratory and microbiology lab at College of Agriculture, Padannakkad on March 30.

Chief Minister said that knowledge generated in laboratories should be used to boost farmers' confidence by enhancing productivity and profitability.

'My Government wants to support farming and do whatever possible for development of agriculture. I don't discount the fact that KAU has done a lot, but you can definitely do a lot more. You have solved many a problems but many remains to be solved as well. Innovative research is need of the hour. For example we have to



Chief Minister Pinarayi Vijayan inaugurating the new facilities at CoA, Padannakkad

promote dry land agriculture and soil less farming in the wake of water scarcity and allied problems,' He said.

Chief Minister also called for voluntary involvement of each and every citizen in Haritha Keralam mission which is meant to regain and retain the greenery of the state.

Minister for Agriculture V. S. Sunil Kumar said that KAU has been providing research support for agricultural sector. Many a laudable achievements have been made and much more is possible. 'I am closely monitoring the developments. Even the latest budget of the university

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## GC approves 579.57 crore budget

The KAU General Council in its annual meeting held on 29 March approved Rs. 579.57 crores budget for the year 2017-18.

The budget was presented by K. Rajan MLA in the meeting chaired by KAU Pro-Chancellor and Minister for Agriculture V. S. Sunil Kumar.

The budget envisages establishment of new agricultural colleges at Ambalavayal and Kumarakom, agri polytechnics in selected locations, Centre for Plant Genetic Resources, Upgradation of the Radio Tracer lab, a permanent exhibition unit, Climate resilient research programme, KAU brand of value added products, research support for vegetable farming in Vattavada-Kanthallur belt and consultancy support for Haritha Keralam project.

Other important proposals include Modernisation of classrooms, Upgrade-

tion of library facilities, Online courses to support entrepreneurship, Release of new crop varieties including a short duration drought tolerant rice, Water conservation models in university farms, Thrust on solar power for farm operations, International agri exhibition and Farmers' science congress. Minister Sunil Kumar said that the government wants the University and state department of Agriculture to work hand in hand and many of the budget programmes can be implemented jointly.

Vice-Chancellor Dr. P. Rajendran assured the house that filling up of vacancies of teachers, staff and labourers will be completed in a time bound manner.

The meeting was attended by Executive Committee members, B. D. Devassy MLA, General Council members, Registrar Dr. S. Leenakumari, Comptroller, Faculty Deans, Directors and other officers of the university.

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# AWARDS & RECOGNITIONS

**Dr. P. Suresh Kumar**, Professor and Head, Radiotracer Laboratory, KAU bagged the S. N. Ranade Memorial Senior Scientist Award for Excellence in Micronutrient Research for the year 2017. The award was presented in the three day workshop on AICRP on Micro, Secondary and Pollutant Elements held at Indian Institute of Soil Science, Bhopal during March 21-23.



Dr. P. Suresh Kumar was unanimously selected for the award instituted by the Institute for Micronutrient Technology in view of his contribution on micronutrients research, especially with respect to soil scenario in Kerala.

Dr. P. Suresh Kumar has more than 50 research papers to his credit. He is the winner of Young Scientist Award 1995. His significant contribution includes unraveling the chemistry and fertility of soils with respect to P, Zn, Fe, and B in tropical acid soil of Kerala, soil test based crop specific recommendations and current strategies for Soil Health Management and development of Soil Health Cards for Kerala farmers.

**Ranasalva N.**, Ph.D Scholar and **Dr. K. P. Sudheer**, Professor, KCAE & T received the best paper award in the National Seminar on Biodiversity Conservation and Farming Systems for Wetland Ecology held at RARS, Kumarakom on 22-23, February 2017. The award winning paper was on *Comparison of atmospheric and vacuum deep fat frying on product quality for selected vegetables*.

**Dr. Ameena M.**, Assistant Professor, CoA, Vellayani received the Best Poster Award In the Third National Biodiversity Congress organised by Kerala State Biodiversity Board at Government Guest House, Thycaud during February 23-24.

**Dr. Gavas Ragesh**, Assistant Professor, AICRP on Fruits, BRS, Kannara has been awarded the Best Research Paper prize in the National Seminar on Natural Resources Management for Horticultural Crops under Changing Climatic Conditions held at CWRDM, Kozhikode on 16<sup>th</sup> & 17<sup>th</sup> March, 2017.

His research work titled Biology and Management of Banana Skipper butterfly (*Erionota torus* Evans 1941): An emerging threat to Banana cultivation in India was chosen the Best from among scientists representing various ICAR institutes, SAUs and Research Organizations of the country. He was selected based on the excellence in plant protection research in unraveling the species identity, developing various IPM strategies under ICAR-AICRP on Fruits Research Project, especially bio-control agents against banana skipper butterfly, a major emerging pest of Banana in India.

**Dr. K. P. Prameela**, **Dr. Meera V. Menon** and **Dr. T. Girija**, Professors, CoH, Vellanikkara received the Best Poster Presentation Award in the Biennial Conference of Indian Society of Weed Science held at MPUAT, Udaipur from 1-3, March 2017. The award was for the poster titled *Evaluation of non-chemical weed management techniques in brinjal* presented by them.

**Akhil Ajith**, PG scholar and **Dr. N. Kishore Kumar**, Professor, CoA, Vellayani won the Best Paper award in the workshop on Farmer Producer Companies: Status & Strategies for sustainable functioning organised at Agricultural College and Research Institute, TNAU, Madurai during 20-21, March 2017. The award was for their paper on *Sanghamaitthri - An innovative approach for sustainable livelihood for Kerala farmers*.

## Versatile events mark World Water Day

A series of awareness programmes were organised by KAU to commemorate World Water Day on March 23.

At the programme held at Thrissur Press club presentations on water scarcity and ill effects of climate change were made by Dr. P. Indiradevi, Head, Academy for Climate Change Education and Research and Dr. C. S. Gopakumar, Scientific Officer. KAU Director of Extension Dr. S. Estelitta delivered Key Note Address.

In another programme aimed at water literacy awareness held at the University main campus e-DID (electronic tool for Drip Irrigation Design) software developed by Department of Agricultural Engineering, CoH was launched online. The software provides all assistance for drip irrigation system including information on cost and benefit when prompted with crop, area and place. The software will be available on the web address [edid.kau.in](http://edid.kau.in). Director of Extension Dr. S. Estelitta, CoH Associate Dean Dr. George Thomas, Dr. K. P. Visalakshy and Dr. P. K. Suresh Kumar spoke.

An awareness programme was organised by Communication Centre, Mannuthy. Exhibition on water literacy and irrigation water management and classes on water use efficiency and irrigation techniques like drip irrigation, wick irrigation and rain water harvesting were the highlights. Dr. S. Estelitta, Dr. Alexander George, Dr. Binoo P. Bonny and Dr. S. Helen spoke.

## KAU Honours Entrepreneurs On Women's day

KAU chose to honour successful women entrepreneurs on the Women's day.

Latha Vijaya, Sumila Jayaraj, Latha Raveendran, Rekha P. T. and Latha Santhosh who used agri related technologies to foster entrepreneurship and raise income to sustain the family were honoured in the function inaugurated by Director of Extension Dr. S. Estelitta.

A talk on Legal Protection for Women by C. Mujib Rahman, Sub judge, District Legal Services Authority was also arranged in connection with the event.

The function presided over by Director of Students' Welfare Dr. T. I. Manoj was attended by General Council members Dr. Jiju P. Alex and Dr. A. Prema, ATIC Head Dr. Sreevalsan J. Menon and Cocoa Research Centre Head Dr. B. Suma, Dr. Smitha Baby proposed vote of thanks.

### Cyber Crime Awareness

In another programme in connection with Women's day organised by the KAU Centre for Gender Studies and Farm Entrepreneurship Development (CGSFED), Cyber Crime Investigator Dr. Dhanya Menon delivered a talk on Cyber Crime: Awareness and Prevention. The programme was inaugurated by KAU Registrar Dr. S. Leena Kumari in a function presided over by Dr. P. S. Geethakutty, Prof. & Head, CGSFED.



## A Rare and Unique Get-together Governor hosts Award Winning Farmers



The Plant Genome Saviour awardees with Hon'ble Governor Justice P. Sathasivam, Vice-Chancellor Dr. P. Rajendran and KAU Officials

The Farmers could believe it only after the event was over. While getting access to Rajbhavan itself is a rare privilege, getting an audience with the Hon'ble Governor and spending time with him was a unique honour for the fourteen Kerala farmers who won prestigious Plant Genome Saviour Awards.

The rare rendezvous on February 10 was made possible by the magnanimity of Hon'ble Governor who reciprocated positively to the request of KAU Vice-Chancellor Dr. P. Rajendran, appreciating the pertinence and importance of the Plant Genome Saviour Award as well as Kerala's substantial share in the awards.

Governor Justice P. Sathasivam, who is also the Chancellor of KAU appeared happy and enthusiastic in agreeing to meet and greet the award winners and talking to each of them

regarding their unique activities. He honoured the farmers with shawls and spent time with them to exchange ideas about farming.

The farmers were in awe and admiration of Justice Sathasivam and appreciated his sincere approach to farming and affection for farmers. They took home sweet memories of a rare union with the inimitable Governor who opened the gates of Rajbhavan to the farmers for the first time in history. They also thanked KAU and staff of Rajbhavan for providing them with this proud privilege.

In addition to the Vice-Chancellor, Registrar Dr. S. Leenakumari, Director of Extension Dr. S. Estelitta, Director of Research Dr. Sajan Kurien and IPR Cell Coordinator Dr. C. R. Elsy were also present in the event.

## New facilities at Moncompu RRS inaugurated

The laboratory, Farm mechanisation training centre, seed store and sales counter at RRS, Moncompu was inaugurated by Kodikkunnil Suresh MP on February 10.

The new facilities are bound to enhance the technical support for farming and farmers in Kuttanad, Kodikkunnil Suresh observed. He also urged the University and Government to provide more facilities at Moncompu so that it can serve as a centre for excellence for Kuttanad mode of farming.

Minister for Agriculture V.S. Sunil Kumar in his message said that RRS, Moncompu has excelled in lending technological support for farmers in Kuttanad. Dr. M. S. Swaminathan also graced the event with his message. Vice-Chancellor Dr. P. Rajendran in his keynote

address highlighted the role of scientific farming practices in redressing challenges posed by climate change.

The function presided over by District Panchayat President G. Venugopal was attended by Champakkulam Block Panchayat President Poly Thomas, Grama Panchayat President George Mathew Panjimaram, KAU General Council member Rajiv Nellikunnel, KAU Director of Research Dr. Sajan Kurian, Director of Physical Plant Dr. V. R. Ramachandran, LSGI members, farmers and officials of line departments as well as CPWD. KAU Registrar Dr. S. Leena Kumari welcomed the gathering and Kumarakom RARS Associate Director Dr.D.Ambika Devi proposed vote of thanks.

A seminar on paddy farming was also organised in connection with the programme.

## Dr. V. B. Padmanabhan Retires

Dr. V. B. Padmanabhan, Associate Director of Extension (SR) and Head, Department of Agricultural Extension, CoA, Vellayani retired from service on superannuation on March 31.



Dr. Padmanabhan entered KAU Service in 1979. He has several publications to his credit and has guided nine Post Graduate and two Ph.D. Scholars. A proponent of Terrace farming, he was part of first phone in Agriculture programme from Thiruvananthapuram AIR and also the first Agricultural programme on DD, Malayalam.



## *Message from the Vice - chancellor*

# Let's be a bit innovative

It is a fact that more people are involved in small scale cultivation than extensive farming. Small holdings of maximum twenty cent size are more common and fifty percent of them are below ten cents. This is particularly true in urban/peri urban setup where effective area available for cultivation in a homestead is between one and three cents from which vegetables and seasonal fruits for a five member family can be produced with a systematic and scientific approach.

The hallmark of homely production of fruits and vegetables is their safe to eat character. It is easier to adopt organic farming practices in such small holdings and an integrated farming model would do wonders. For example a small 10 m<sup>2</sup> fish tank integrated with a small poultry/vegetable unit in the homestead will assure sustainable nutrient supply to the family as well as effective recycling of water. Thus, in our land scarce state, it is necessary to devise innovative approaches in plant production and protection to ensure the involvement of otherwise employed and earning people in farming.



Judicious and timely adoption of Plant protection measures and fertilisers still holds the key in farming. These two factors also ensure that the farm produce get the 'safe to eat' tag, while cutting agricultural non-point source pollution and making it more green in nature. Indiscriminate use of fertilisers and chemicals is not only labour intensive but is also costly and lead to wastage and environmental pollution. Need based and judicious approach saves labour, time, cost and resources.

It is in this context that the relevance of 'ready to use' agri inputs being prepared by Kerala Agricultural University gains significance. Balanced combinations of plant nutrients in encapsulated form are very easy to handle, cost effective, ecofriendly and create a healthy soil-plant-animal-man continuum. In addition to major and micro nutrients, soil amendments, bio fertilisers and bio control agents can also be made available in ready to use form. Such products not only become attractive to handle, but also reduces farm based drudgeries to considerable extent.

The University has already started the preparation of fertiliser sticks as well as nutrients in granular and liquid forms. Nutrient tablets, balls, capsules, ampules and sachets will follow suit. Quality control is a considerable challenge in the manufacturing process. Equally important is the dissemination of the correct know-how to clients. If either of these key steps falter, it will fail to achieve the desired effect. Though these realities have slowed down our efforts, the confidence we gained will help us to experiment more and further progress seems easier and quicker.

Concentrated nutrient stock solutions for foliar applications in different types of-cucurbitaceous, solanaceous, leafy vegetables and ornamental plants can be standardised in organic base or gel base and supplied in ampules or sachets. Plant protection agents like Bordeaux mixture and paste, Chesnutt compound etc. can be made available in tubes. Sachets or ampules for easy use like toothpaste. Soil amendments like Quick lime, Sweet lime, Gypsum, Rock Phosphate etc. can be presented in ball/cake forms. Manure discs enriched with nutrients developed by KAU is another option.

These innovative formulations, meanwhile, has the potential to generate employment opportunities. Once the formulations are standardised under scientific supervision, presenting them in sachets, ampules or in tablet or pellet form can be entrusted with skilled labour force. NGOs and Women SHGs can perform this role under supervision of scientists and packing part can be developed as a rural industry. This enhances the financial viability of the exercise as well.

Altogether the innovative initiative by the University is a significant step in enhancing productivity, improving soil quality, encouraging small scale farming and ensuring environmental protection. I trust the initiative to gather momentum after the initial phase and would help to popularise farming in the urban and peri urban set up, leading to food and nutritional security at community levels, which in turn will spread to state and national level.



## Proper Implementation of Farmer Welfare schemes a priority: Minister



Minister inaugurates Kottayam KVK Building

Minister for Agricultural Development and Farmers' Welfare V. S. Sunil Kumar inaugurated the new Office cum lab complex of Kottayam KVK on March 10 in a function presided over by K. Suresh Kurup MLA.

The minister, in his inaugural address, called upon the farming community to take advantage of the welfare measures announced for them in the state budget.

'Farmer welfare schemes in state budget should be made use of. Steps to ensure proper implementation of schemes proposed by Central and State governments will be ensured. A meeting of the ministers in charge of Agriculture, Animal Husbandry and Fisheries and Vice-Chancellors

of Universities concerned is planned for this. The government also wants to involve people's representatives in all developmental programmes and prevent misuse and exploitation of welfare schemes. We have requested for more KVKs in Kerala even while assuring strengthening and coordinating existing KVKs,' he said. Sunil Kumar also announced that the demand for Agricultural Colleges at Kumarakom and Ambalavayal will be favourably considered.

C. K. Asha MLA, Vice-Chancellor Dr. P. Rajendran, ATARI (Bengaluru) Director Dr. Srinath Dixith, KAU Executive Committee member Dr. C. N. Ravishankar, General Council members Dr. Jiju P. Alex, Dr. A. Prema and Rajiv Nellikkunnel, Registrar Dr. S. Leenakumari, Director of Research Dr. Sajan Kurian, Director of Physical Plant Dr. V. R. Ramachandran and LSGI representatives spoke. Director of Extension Dr. S. Estelitta offered welcome and KVK Head Dr. G. Jayalakshmi proposed vote of thanks.

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## CM Calls for Innovation in Agricultural Research

has proposed release of new crop varieties including short duration rice cultivars tolerant to drought and establish a Plant Genetic Resources Centre to facilitate conservation of germplasms of all native varieties. 'he said after laying the foundation stone for a centre for protected cultivation.

Minister for Revenue E. Chandrasekharan presided over the function. P. Karunakaran MP spoke about the dire needs of the college and KAU Vice-Chancellor Dr. P. Rajendran delineated the utility of new facilities. Kanjhangad Municipality Chairman Rameshan; Nileswaram Municipality Chairman K. P. Jaya Raj; District Panchayat President A. G. C. Basheer; LSGI representatives; Dr. A. Anil Kumar, Dean (Agriculture); Dr. Sajan Kurien, Director of Research; Dr. V. R. Ramachandran, Director of Physical Plant; Dr. R. Krishnakumar, Controller of Examinations; Dr. R. Sujatha, ADR, Coconut Mission and Dr. M. Govindan, Associate Dean participated. M. Rajagopalan MLA welcomed the gathering and Associate Director, PiliCode RARS, Dr. P.R. Suresh proposed vote of thanks.

## Workshop on IPM measures

Centre for Rapid action to Manage Crop epidemics, Communication Centre, Mannuthy organised a workshop on integrated pest and disease management on March 29.

The centre aims at timely forecast of pest attacks and crop epidemics, said Dr.S.Estelitta, Director of Extension. 'A crop epidemics diagnostic laboratory has been set up at the communication centre to validate inferences obtained during field inspections,' she told the farmers. 'Advisory services based on the lab results will be pursued for control and containment of crop pests and disease infestation. Monthly technology bulletins will be disseminated through media for farmers' benefit,' she said.

The workshop was conducted to sensitize the public about identifying of the symptoms of pest attack, diseases and nutrient deficiencies. Prophylactic and curative measures to manage them were also discussed. Participants were made aware of the importance of soil fertility, pest and disease management. Emphasis was given for organic and biological management methods. Around 80 farmers from various parts of Kerala got benefited from deliberations in the workshop.

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## Plant Genome awards

plants and orna-mental plants in his farm. Thomas identified a pepper cultivar, with branching of spikes, conserved it and named it as Pepper Thekkan. He was bestowed with National Innovation Foundation Award (2012) and ICAR innovative farmer award of 2015.

Thomas has developed an innovative method for breeding of Giant Gourami fish throughout the year. He has also developed a nematicide for the control of nematodes affecting cardamom. An expert in grafting the pepper plants with Piper colubrinum plants to resist quick wilt, Thomas has also developed a pest trap for the sucking pests of cardamom and a bio-pesticide from the leaves of Ocimum.

Reji Joseph is maintaining a collection of 22 gooseberry (Amla)



T.T. Thomas & Reji Joseph at the award function

genotypes along with other crop plants including 6 types of Kuvalam (Aeglemarmelos), 28 species of medicinal plants, local types of sandal apart from local breeds of goat like. His farm named as *Gooseberry land* is also a Centre for Nature club activities and obtained organic farming certificate from INDOCERT during 2010-2015.



## Minister highlights Power of Knowledge Centres

Minister for Agriculture V. S. Sunilkumar has said that knowledge is the greatest force in the world.

Speaking after inaugurating the developmental programmes of KAU Central Library on March 25, the minister pointed out that fascist forces have always tried to shutdown sources of knowledge to foster their interests.



Minister V.S. Sunil Kumar inaugurates the development programmes of KAU Library

'The persistent attempt of fascist forces, new and old, to keep man away from knowledge centers and thinkers prove that knowledge is the force they fear most. Societies which succumbed to their control remained static while those societies which embraced knowledge progressed. The Renaissance in Kerala, for example, used the light of library movement to march ahead', he said.

The library becomes meaningful when its resources are put to maximum use. I also want traditional farm wisdom to be preserved in the library along with modern knowledge banks, Minister said. Sunil Kumar also released the annual magazine of Academy for Climate Change Education and Research.

KAU Vice-Chancellor Dr. P. Rajendran in his presidential address stressed the importance of library in advanced learning and research. Executive Committee members Dr. Jose Joseph and Aji Francis, Registrar Dr. S. Leenakumari, University Union President Adarsh C. Soori and Librarian A. T. Francis spoke.

## Best NSS Unit Award for CoA, Padannakkad



Minister E. Chandrasekharan distributes the Best NSS Volunteer award

CoA, Padannakkad received the NYLP Award 2015-16 for the outstanding NSS Units instituted by the Union Ministry of Youth Affairs & Sports.

Minister for Revenue E. Chandrasekharan distributed the awards in the function presided over by Kanjhangad Municipal Chairman V. V. Rameshan on 18 March. While the award plaque for the best NSS unit was received by the Associate Dean, CoA, Sangeetha K. G. received award for best NSS Programme Officer and Eldho Shaju and Muhammed Suhaib Ismayil received the award for best NSS Volunteers.

Kanjhangad Municipal Chairman, Prof. K. P. Jayaraj, DSW Dr. T. I. Manoj, Controller of Examinations Dr. R. Krishna Kumar and Associate Director Dr. P. R. Suresh participated.

## Seminar on tuber crops at ARS, Mannuthy

A seminar on tuber crops was organised at ARS Mannuthy on March 23 as part of the Station's Centenary year.



N. M. Shaji, Who won National award for conservation of Tuber crops being honoured

The benefits of tuber crop diet and the vast varieties of tuber crops ideal for intercropping was delineated by experts and lead farmers. KAU Registrar Dr. S. Leenakumari inaugurated the seminar. N. M. Shaji, who won Plant Genome Saviour award for conservation of tubers was honoured at the function.

An exhibition of tuber varieties held beside the seminar was inaugurated by Director of Extension Dr. S. Estelitta. Pattambi ADR Dr. M. C. Narayanan Kutty, ARS Head Dr. A. Latha, Dr. U. Sreelatha and Dr. U. Jaikumaran spoke.

## International Delegation at KAU

Twenty five International delegates visited KAU to gather a first hand knowledge on potential women friendly enterprise technologies floated by the University.

The delegates from Ghana, Afghanistan, Mozambique, Kenya, Liberia, Malawi, Mongolia and Uganda had a interaction with the Vice-Chancellor to begin with and later visited various units in the main campus.

Vice-Chancellor Dr. P. Rajendran told the visitors that Kerala has an excellent model of women involvement in development and entrepreneurship programmes. 'Sixty percent of active human resources in agriculture belong to the fair sex in Kerala. Unique models for women empowerment developed in KAU can be replicated in your countries', he said.

Dr. P. S. Geethakutty, Prof. & Head, Centre for Gender Studies and Farm Entrepreneurship Development, coordinated the visit. The delegates visited the Wood museum at College of Forestry, processing department and Centre for Plant Biotechnology and Molecular Biology at College of Horticulture, Food Security Army Training and Development unit at ARS, Mannuthy and Cashew Apple Processing Unit at Cashew research Station, Madakkathara.

'We have gained a lot from this visit.' Said Ms. Kollie Kona Sarah, Extension Officer, Ministry of Agriculture, Liberia. 'Some of these practices are pertinent to our native countries and we would be happy to collaborate with KAU for training and advice.', she said. Mr. Tubwangye Samuel, from Department of Agricultural Extension, Uganda expressed keen interest in student and faculty exchange programme and training in agro processing.



## Call for Collective effort To Conserve Wetland Ecosystems

The two day national seminar on Biodiversity conservation and farming systems for wetland ecology organised by RARS, Kumarakom on 22 and 23 March was inaugurated by KSCSTE Executive Vice President Dr. Suresh Das.

Dr. Das stressed the need of a collective effort for conservation of wetland ecosystems. 'The considerable increase in number of people recognizing the importance of climate change is appropriate and welcome. Deliberations at various levels will facilitate a positive change. The key challenges are productivity enhancement reducing the stress on natural resources, shortage of arable land and population density,' he said.

KAU Vice - Chancellor Dr. P. Rajendran in his presidential address pointed out that Kuttanad is a permutation of unique and fragile ecosystems closely linked to rivers. 'Unhindered water flow has been hampered by unscientific bund constructions. Drastic decline in paddy productivity and pollution of water bodies are serious issues to be addressed. Several PG-Ph.D thesis about the problem soils in Kuttanad and the management of the same are available in KAU. RARS



Dr. Suresh Das delivering Inaugural address at Bio diversity seminar

Kumarakom also has several research achievements. These findings should be used for the benefit of farmers,' he said.

KFRI Director Dr. B. S. Corrie IFS delivered the key note address. KAU Registrar Dr. S. Leena Kumary and IRTC Director Dr. K. G. Padmakumar spoke. Director of Research Dr. Sajan Kurien welcomed the gathering and Kumarakom ADR Dr. D. Ambika Devi proposed vote of thanks.

## Earth Day Celebrated

The Students, Staff and Faculty of ACCER celebrated the Earth Day 2017 on April 22. Dr. B. Manikiam, Professor at the Bangalore University and former Scientist, Atmospheric Science Division, ISRO was the chief guest.

In his talk on Satellite Applications in Climate Change, Dr. Manikiam stressed the need to protect our mother Earth for the future generations. He explained the impacts of climate change across the globe in general and over India in particular.

Dr. Manikiam delineated various types of satellites and their role in weather forecasting and highlighted the need to study satellite meteorology to understand the applications of satellite and to understand satellite imageries so as to explore the area of weather forecasting. Further, Dr. Manikiam briefed to the students about job opportunities in climate science and allied sectors at national and international level.

## Brainstorming Session moots Review of PAP Agreement

A brainstorming session on Parambikulam – Aliyar (PAP) Agreement held at KAU mooted a relook at the whole project and agreement with conservation of western Ghats as the prime focus.

The session was jointly organized by Academy for Climate Change Education & Research, Centre of Excellence in Environmental Economics and Kerala State Centre for Policy Dialogue on Water Conflicts to de-mystify the complex project and agreement to facilitate a better understanding of the issue, evaluate the current agreement against National/International norms/practices and explore the way forward in view of the technological and social dimensions of the projects and its fallout.

Speakers pointed out that before the implementation of PAP, entire yield from the respective tributaries of Periyar, Chalakudy and Bharathapuzha used to flow westward. 'The existing PAP agreement, does not have a validity period. The provision for reviewing the agreement once in 30 years has not never been invoked because the review is not explicitly mandatory. We have to find a way out and address the issue afresh in the light of definitely declining trends in rainfall and consequent environmental damage', They said.

They also opined that the issue should be viewed in the larger perspective of inter basin multi river water management for the environmentally fragile locations not merely as an interstate dispute.

## Agricultural Programme for Jail Inmates launched

Minister for Agriculture V. S. Sunilkumar inaugurated the Amruthodyanam Punarujeevanam project designed by ARS, Mannuthy at Vyyur Jail compound on February 4.

Speaking after inaugurating the project and releasing the potential credit plan of NABARD, Sunil Kumar called upon the banking institutions to ensure that the funds earmarked for farmers' Welfare is not channeled for unproductive purposes. Minister also.

Minister pointed out that major portion of amounts set apart for farm loans through banks is being utilised for agricultural gold loans and it does not benefit the farmer per se.

'Real Farmer doesn't have gold to pledge and those who pledge large quantities of gold to avail low interest loans are not real farmers. Government wants to put an end to such misuse of amounts earmarked for farmers' benefits I urge NABARD to take stringent measures in this regard', Minister said.

Minister lauded the programme launched for exhaustive agricultural development of jail campus and hoped that the programme would benefit the jail inmates as well as the public through production of safe to eat vegetables and allied products.

NABARD General Manager P. Balachandran presided over the function held on February 4. District Collector Dr. Kausigan, KAU Director of Extension Dr. S. Estelitta, Jail Superintendent Vinod Kumar, NABARD DGM Deepa S. Pillai, Lead Bank Manager Kanakambaran, Municipal Councillor Suresh Kumar, ARS head Dr. A. Latha and Jail Welfare Officer Shyamalakumari participated.



## Farmer Interface At RARS, Pilicode

RARS, Pilicode and Doordarshan Kendra, Trivandrum jointly organised a farmer interface programme on 13 & 14 February 2017. The programme was inaugurated jointly by K. R. Beena, Programme Head, DDK, Thiruvananthapuram. Dr. P. R. Suresh, Associate Director, RARS, Pilicode presided over the function.

The features of the event were technical sessions on *Traditional crop varieties, Malabari goat and kasaragod dwarf animal breeds, Rice year in Kerala – scope and importance, Drought management strategies for Kerala's agriculture, Future of coconut farming in Kerala, Central government and state government schemes in agriculture and allied sectors and Suitable agricultural developmental models for Kerala.*

The sessions were guided by KAU scientists, experts from CPCRI, Kasaragod and officials from state Departments of Agriculture, Animal Husbandry and Soil conservation. The technical sessions were followed by farmers interactions.

## KAU Pavilion at Thrissur Pooram Exhibition

KAU pavilion in Thrissur pooram exhibition was inaugurated by Executive Committee member K. Rajan MLA in a function presided over by Vice-Chancellor Dr. P. Rajendran on April 11.



Inauguration of KAU Pavilion in Thrissur Pooram Exhibition

The pavilion created on theme integrated farming features homestead farming model, water efficient irrigation methods, Aquaponics, water harvesting and vertical farming. A book on soil types in Kerala authored by Dr. P. K. Sushama was also released in the function attended by Registrar Dr. S. Leena Kumari, Director of Extension Dr. S. Estelitta, Communication Centre Head Dr. Binoo P. Bony and CTI Head Dr. Alexander George among others.

## Seminar on Professionalism in Co-operative sector Minister bats for enhancing efficiency

Minister for Cooperation and Tourism Kadakampalli Surendran has said that enhancing professionalism in Co-operative sector is highly pertinent in the evolving scenario.

Speaking at the Valedictory function of Seminar on Need for Professionalising Co-operative sector organised by KAU Students' Union the minister said that mushrooming of small banks and smart banks in nooks and corners throws up new challenges to co-operative sector.

'I don't think that professionalism is totally absent in Kerala's Co-operative sector. It has its own strengths with which it could tide over many challenging situations including the crisis built up after demonetization. Yet we have to prepare for the challenges ahead. Co-operative sector too has to gear up and enhance its efficiency, technical competence and versatility. It is in this context the role of academia becomes relevant. I reckon the contributions of KAU in the field of developing human resource



Minister for Cooperation Kadakampalli Surendran speaking at KAU seminar

for co-operative sector. Government is bound to support and encourage such institutions.', he said. The minister also said that the Kerala Bank, mooted in co-operative platform will fill the vacuum created by SBT's merger with SBI.

KAU Registrar Dr. S. Leena Kumary presided over the function. KAU General Council members V. S. Sathyaseelan, C. H. Muthu and Thouseena, KAU Students' Union President Adarsh C. Soori, Director of Students' Welfare Dr. T. I. Manoj, CCBM Associate Dean Dr. Moly Joseph and student representative Aswathi spoke.

## Stake holders' meet calls for Strengthening of Agromet Advisory Systems

The state level meeting of stake holders on agro meteorological advisory services in Kerala held at CoH, Vellanikkara on 17 February recommended strengthening agromet advisory system in the state.

Formation of Block level committees to implement agro met recommendations, district level agro met services through KVVKs, use of all media and Cable TV network for effective delivery of messages reframing of advisories to include micro climatic variations and convergence of efforts through different agencies are some of the steps mooted in the meeting.

Madakkathara Panchayat President P. S. Vinayan inaugurated the event in a function presided over by Dr. S. Leena Kumari, KAU Registrar. Vinayan pointed out that all other living beings and their habits remain unchanged but humans not only changed the habits

but their habitats as well. 'The detrimental effects of human interventions in nature are so grave that all other living beings will rejoice if humanity becomes extinct. Being responsible for the climate change we have to shoulder the responsibility to mitigate illeffects of it also,' he said.

Director of Research Dr. Sajan Kurien in his Keynote address stressed the need of an impact study on agromet advisory services. 'Strengths and weaknesses of existing system should be analysed. Accuracy of inputs invariably influence accuracy of output,' he said.

IMD Deputy Director General S. B. Thampi outlined the programme. S. Sudevan, Head, Thiruvananthapuram Meteorological Centre, CoH Associate Dean Dr. George Thomas and Dr. B. Ajithkumar spoke.