



Dr. R. Chandrababu takes over as KAU VC

Dr. R. Chandrababu takes over as KAU VC. Dr. R. Chandrababu assumed charge as KAU Vice-Chancellor on 27 December 2017. He took over the charge from Shri. Teeka Ram Meena IAS, Agricultural Production Commissioner, who was holding the charge of Vice-Chancellor following the completion of term of Dr. P. Rajendran on 31 October 2017.



Agricultural production Commissioner Teeka Ram Meena IAS welcomes Dr. R. Chandrababu

Dr. Ranganathan Chandrababu, Professor in Crop Physiology, is the former Director, Centre for Plant Molecular Biology and Bio Technology and Dean (PG Studies), TNAU. He did his Post Doctoral research as Rockefeller Fellow at Texas University and Full bright scholar at Cornell University. He was appointed as the eleventh Vice-Chancellor of KAU by the Chancellor on 23 December 2017.

VAIGA 2017 Let's foster Agri business: Governor

Governor Justice P. Sathasivam has said that agri entrepreneurship development is inevitable for enhancing farmers' income.

Speaking after inaugurating the second edition of international workshop and exhibition Value Addition for Income Generation in Agriculture (VAIGA 2017) at KAU Campus, Vellanikkara on December 27, the Governor said promoting agriculture and allied sectors is an ideal example of nation building and Government of Kerala has initiated many laudable steps in this direction.

'Skill up gradation in farming sector, including processing technologies will help to enhance farmers' status and income. Passion for farming is coming back. Agri entrepreneurs should be treated on par with technocrats. Value addition of every crop should be our aim. VAIGA is a wonderful concept and opportunity to show case advanced technologies. Let's together make Kerala a paradise for agri business entrepreneurship', Justice Sathasivam said.

Minister for agriculture V. S. Sunil Kumar in his presidential address said that VAIGA is not a mere exhibition but a forum for learning and sharing experience.



Governor Justice P. Sathasivam inaugurates VAIGA 2017 at KAU Main Campus on December 28.

We are striving to develop a new farming culture by integrating post harvest handling with crop management. New generation has to embrace advanced technology in farming and processing. If at least forty percent of our produce is subjected to value addition, farmers' life will be different.' Minister explained.

K.Rajan MLA, District Panchayat President Mary Thomas and Ollukkara Block Panchayat president Umadevi spoke. Agricultural Production Commissioner Teeka Ram Meena IAS offered welcome and Director of Agriculture A. M. Sunil Kumar proposed vote of thanks. VAIGA, which culminated on December 31 was a grand success, both in terms of participation and attendance.

Pooppoli 2018 Minister Bats for Millet Farming

Minister for Agriculture V. S. Sunil Kumar has called for promotion of Millet cultivation in Kerala.

Speaking after inaugurating the closing ceremony of Pooppoli 2018 at RARS, Ambalavayal on January 18, Minister said that a millet village comprising of 32 tribal colonies have been formed to emphasise importance of millet cultivation.

'Millets, the super food, will have to be popularised. We are in touch with Indian



Minister V. S. Sunil Kumar inaugurates the valedictory function of Pooppoli 2018

Institute of Millets for technical support for cultivation and post harvest handling of different Millets. Areas where Millets can be successfully grown have been identified. We have also decided to identify and support tribal families involved in conservation of traditional crop varieties', he said.

(Continued on page 5)

INSIDE THE ISSUE

| | |
|---------------------------------------------------------------|----|
| Research News, Awards & Recognitions | 2 |
| Convocation, Scientific Insight Lecture Series | 3 |
| GC Meet, ARS Centenary, KVKs to aid rural development | 4 |
| Achutha Menon memorial Block, Bio-tech fest & Pooppoli | 5 |
| Message from the Vice-Chancellor | 6 |
| Organic Farming workshop, GI for more produces | 7 |
| Pattambi RARS@90, Republic Day, Book fest and workshop on IP | 8 |
| Agri Clinic, Plants for Dye production & Jackfest | 9 |
| Museums at CoF, Seminar on Urban horticulture & Cocoa Farming | 10 |

Recirculatory Aquaculture model

IFSRS, Karamana has developed a successful model for recirculatory aquaculture. The simple but effective filtering mechanism incorporated in the model facilitate reuse water, addressing a major constraint in homestead aquaculture.



The main constraint in growing fish in artificial tanks is the need to replace water every other day so as to counter the threat of toxic ammonia build up caused by accumulation of fish wastes. In the model developed by IFSRS, water

replacement is required only once in a month, saving time, energy and labour.

The main components of the unit are a 2000 litre fibre tank, a specially designed five tier filtering mechanism on top of the tank, a submersible pump for recirculation of water between the tank and filter and pipes for inter connectivity. Each layer of the filter is 5 cm in thickness and is composed of ¾ inch metal, baby metal, sand, charcoal (made out of coconut shells) and sponge, in ascending order from the base of the container. The submersible pump enables continuous recirculation of water so that the impure water is pumped to the top, filtered and is returned to the tank.

The sand, charcoal and sponge needs monthly cleaning. The 2000 Litre fibre tank accommodated as many as 100 GIFT (Genetically Improved Farm Tilapia) fish, which gained up to 300 gm body weight in 7-8 months fetching good price.

Off-season Production of Cabbage Hybrids

The study conducted at the Department of Olericulture, CoH, Vellanikkara has identified two hybrids -NS 43 and Green Voyager-as high yielders in rain shelter.



The study established the feasibility of off-season cultivation of tropical cabbage hybrids in Kerala using rain shelters. Rainy season (May-September) in

Kerala is an off-season for most temperate vegetables and protected cultivation was the only known alternative. Rain shelter, a low cost, naturally ventilated poly house is ideal for off-season vegetable cultivation in the state.

The successful off-season cultivation of vegetables in rain shelters offers good opportunity for farmers because the vegetables so produced during off season will have good demand and get premium price in the market.

Awards & Recognitions

Dr. N. Kishore Kumar,

Prof. & Head, T S S, Vellayani was bestowed with Indian Society of Extension Education Fellow award. The award, in recognition of his outstanding contributions in the field of Extension education, was conferred on Dr. Kishore Kumar during the ISEE National seminar on Doubling farmers' income and farm production through skill development and technology held at BAU, Bhagalpur from 28 to 30. November 2017.



Dr. P. Indira, Professor & Head, Department of Olericulture, CoH, Vellanikkara won the best Poster presentation award in the National Conference on Food and Nutritional Security through vegetable crops in relation to climate change held at Indian Institute of Vegetable Research, Varanasi from 9 to 11 December 2017.

The award was for the paper on *Off-season Production of Tropical*

Cabbage Hybrids in the plains of Kerala coauthored by Malu K., Shanthi E.K. and Ningappa Kirasur, presented in the technical session on Climate – Resilient Vegetables.

Anupama T. V., Asst. Professor, AICRP on Floriculture, CoH, Vellanikkara won the first prize in e-poster presentation in the National Seminar on Food adequacy and Climate change: Strategies for Sustainable Food Production organized by Association of Meat Scientists and Technologists (AMST), Kerala Veterinary and Animal Sciences University (KVASU) and Association of Food Scientists and Technologists (AFSTI) during 3-4 November at Thrissur.

(Parmotrematinctorum (Nyl.) Hale. Parmeliaceae from Wayanad district, Kerala co-authored by Sheela K. B., Saji Gomez, Suman K.T and Girija D.

Arjun Vysakh, PG Scholar, CoH and team secured Best Poster Presentation Award in the National Seminar on Agrometeorology for Sustainable Development with special emphasis on

Agrometeorological Practices for Climate Resilient Farming and Food Security (AGMET-2017) held at CCS HAU, Hisar during 12-14 October 2017.

The award was for the poster *Length of growing period: A comparative study with normal and drought year in Kerala*, coauthored by B. Ajithkumar, Navyashree S. and Athira Ravindran

Dr. P. R. Geetha Lekshmi, Assistant Professor (Hort.), Department of Post Harvest Technology, CoA, Vellayani received Fellowship from the Government of Netherlands for International short course on Horticulture Sector Development for Emerging Markets held in Wageningen, Netherlands from 15th May to 2nd June 2017.

Dr. Haseena Bhaskar, Principal Investigator, AINP on Agricultural Acarology, Department of Entomology, CoH, Vellanikkara was selected for Acarology Development Foundation Scholarship, 2017 of Ohio State University, USA for participation in the Acarology Summer Programme held during June 19 to July 7, 2017.

Convocation 2017

Minister calls for product oriented research

KAU Convocation 2017 was held on 5 October 2017 at Vellanikkara. Minister for Agriculture and KAU Pro-Chancellor V. S. Sunil Kumar declared the Convocation open.

In his address Sunil Kumar asked the young graduates to take up the responsibility to modernize agriculture through innovation, scientific knowledge and creative thinking.

Calling for a paradigm shift from production oriented agriculture to process and product oriented agriculture, Minister further said that agriculture should go hand in hand with nature. 'Agriculture continues to be an important pillar of our economy and its future lies in the efficient use of diminishing natural resources like land, water and energy. Kerala aims at an agricultural strategy of embracing Good Agricultural Practices and a shift from chemically intensive agriculture, but not by promoting fundamentalist postulates of total organic farming. New opportunities in productivity enhancement and capacity building should be tapped by harnessing nano technology, molecular biology, information technology and geo-spatial technology.'

Dr. Narendra Singh Rathore, Deputy Director General, ICAR in his convocation address said that India is becoming more vulnerable to climate change and it affects 52% of population deriving their livelihoods from agriculture and allied sectors. 'The situation warrants advanced technological interventions and competent human resources are required to counter the impact of abiotic stresses on agriculture' he said.

Dr. Rathore pointed out that India, which has only 2.4 percent of the world's land resources and 4.6 percent of water resources supports 18 percent of the world population through its agriculture system. 'This magical transformation from a *ship-to-mouth* existence to a leading exporter of food grains is made possible by advancements in agricultural science and technology triggered by hard work of our farm



Minister V. S. Sunil Kumar honouring Dr. K. P. Sudheer, first KAU scientist to be recognized as ICAR National Fellow in the convocation ceremony held at Vellanikkara on October 5

scientists and farmers. I appreciate the role of KAU as one of the leading State Agricultural Universities of our country with many accomplishments.'

Vice-chancellor Dr. P. Rajendran in his welcome address highlighted the achievements of KAU in education, research and extension. C. N. Jayadevan MP, K. Rajan MLA, former Vice-chancellors Dr. K. V. Peter and Dr. K. R. Viswambharan, members of Executive Committee, General Council and Academic Council, Registrar Dr. S. Leena Kumary, Deans of faculties, Directors of Academics, Research, Extension, Students' Welfare, Planning and Physical Plant and Heads of institutions were present.

Four hundred and fifty four students received their degrees in person while 47 were admitted in absentia. Dr. K. P. Sudheer, the first ever KAU scientist to become ICAR national fellow was honoured in the function.

Scientific Insight lecture Series in Agriculture Launched

Scientific Insight lecture Series in Agriculture (SISA), launched by KAU Extension wing has proved successful in attracting large clientele.

The outreach initiative, named as *Krishi Sasthra Sameeksha* in Malayalam, is planned to educate the masses about scientific perspective of agricultural practices and strategies for mitigating issues in the field. Twelve topics have been selected for the monthly lecture cum interaction programme. Two days are devoted for in depth interaction on each selected topic. The programme is based on the concept that scientific knowledge will help those who work in the planning and development sector, besides the young and old, who are inclined towards farming.

Director of Extension Dr. Jiju P. Alex said that thirty persons, on first come first serve basis, will be admitted to the

programme every month and registration is free. Resource persons are drawn from a pool of experts in relevant topics. The inaugural programme was on Good Agricultural Practices: process and protocols. The other topics selected for SISA are New trends in Crop production, Precision farming, Hydroponics and Aquaponics; New generation molecules in agriculture, Pesticide residues, pest surveillance and prediction; Micro nutrients for soil health management; Climate resilient agriculture, drought mitigation and importance of Pulses; Integrated farming systems-practical guidelines; Environmental Engineering-Theory and Practice; Identification of forest trees and wood processing; Natural Resource Management-Principles of watershed development; Application of GIS in agriculture; Accomplishing Food and Nutritional security and Application of Bio technology in agriculture.

General Council meet Floriculture Research to be intensified

KAU General Council resolved to strengthen floriculture research to aid development of flori farming in the state.

The 130th meeting of the council chaired by Acting Vice-Chancellor Tikkaram Meena IAS at Government Guest House, Thycaud on November 25 took the decision pursuant to a demand raised by K. V. Vijaya Das MLA, in relation to a question by Dr. T. Pradeep Kumar. Chairman assured the house that floriculture departments in colleges under the university will be restructured and revitalised to facilitate development of floriculture in the state.

The council also assured farmers' representative Cheruvayal Raman that the university will provide technical support for soil conservation programmes envisaged under Haritha Keralam mission of the state government.

The meeting held also decided that University will extend technology back up to ensure quality of Seeds and planting materials made available to farmers in the state. A mission mode approach will be initiated to enhance internal revenue of the university. Executive Committee has been authorised to work out modalities in this regard.

While teachers' representatives have been assured that reservation norms will

be strictly adhered to in the recruitment, the demand of students' representatives to expedite hostel construction in various campuses was also agreed to. It was also agreed that Academy for Climate Change Education and Research will be strengthened.

The meeting was attended by Executive Committee members Adv. K. Rajan MLA, Finance Secretary Minhaj Alam, nominated and elected members including MLAs G. S. Jayalal and M. Vincent. Registrar Dr. S. Leena Kumary, Comptroller E. P. Rajamohan, Deans of faculties, Directors of Research, Extension, Planning, Physical Plant and Academics were present.

ARS Centenary

Minister moots Mission to boost mechanisation

Minister for Agriculture V. S. Sunil Kumar has said that a mission to promote scientific mechanisation in agriculture is being launched to enhance productivity.

Speaking after inaugurating the Valedictory of centenary year celebrations of ARS, Mannuthy on December 23, the Minister said the idea is to coordinate the efforts of agencies involved i.e. KAU, State Agricultural Engineering Department, Department of Agriculture, KAMCO, KAICO etc.

'Scarcity of labour is a fact and mechanisation is the panacea to reduce burden on farmers. The coordinated mission will strive to assure availability of trained man power whenever and wherever required. ARS, Mannuthy, which introduced the concepts of Food Security Army and Agro Service Centers will be the hub of this mission and a special officer has already been appointed.' Minister said.

'ARS with its rich experience and hundred year old heritage should take up research to develop different kinds of implements for different regions. It should also initiate steps to formulate special development package of Kole lands,' minister said. He also honoured the former heads, staff and labourers of ARS, Mannuthy.

C. N. Jayadevan MP unveiled a plaque of centenary gate in the function



Minister for Agriculture inaugurates the valedictory of Centenary year celebrations of ARS, Mannuthy on 2017 Dec. 23

presided over by K. Rajan MLA. Remote controlled power tiller, Family tiller, Brush cutter operable by differently abled persons, documentary on 100 years of ARS and Directory of FSA members were released in the function.

Corporation Councillor A. S. Ramadasan, General Council members Dr. B. Suma, Dr. T. Pradeep Kumar, P. K. Sreekumar, Dr. S. Estelitta, Dr. K. K. Sathyan, Dr. Sakeer Hussein, Bibin Chacko, Registrar Dr. S. Leena Kumary, Director of Extension Dr. Jiju P. Alex, Director of Physical Plant Dr. V. R. Ramachandran, FSA special Officer Dr. U. Jaikumaran, ARS Head Dr. A. Latha and Pattambi RARS Associate Director Dr. M. C. Narayanan Kutty participated. Director of Research Dr. P. Indira Devi welcomed the gathering and Associate Director of Research Dr. C. Narayanan Kutty proposed vote of thanks.

KVKs told to support Economic Development, Planning in LSGIs

KAU Vice-Chancellor Dr. P. Rajendran asked KVKs in the state to involve in activities for local economic development and render technology support to LSGIs in planning and implementation of development projects.

He was speaking after inaugurating the meeting organised by Directorate of Extension, KAU to review the activities of Krishi Vigyan Kendras in Kerala.

'Stability and strength our economy depends on the development of local economic structure. Therefore the KVKs have a key role in strengthening local economy by enhancing farmers' income and promoting agribusiness projects,' Vice-Chancellor said.

Dr. D. V. Sreenivasa Reddy, Principal Scientist, ATARI, Bengaluru suggested that the KVKs should add Value added agro advisory services in the services menu.

Dr. Jiju P. Alex, Director of Extension presided over the meeting. Dr. P. Muraleedharan, Programme Coordinator, Alappuzha KVK was felicitated for winning the award for best Kendra in South India.

Dr. Alexander George offered welcome and Dr. Habeebur Rahman proposed vote of thanks.

Bio Tech Festival At CoA, Vellayani

A two day Biotech festival titled 'DNA 2K18' and a Biotech exhibition, Miraikan was organised at CoA, Vellayani on 17 and 18 January 2018.

The fest hosted by B.Sc.-M.Sc. (integrated) Biotechnology students was inaugurated by Minister V. S. Sunil Kumar on 17 January. Agricultural Production Commissioner Teekaram Meena IAS was the chief guest in the function presided over by Dr. A. Anilkumar, Dean, CoA.

The inaugural session was followed by a talk on Prospects & Challenges of Biotechnology, Entrepreneurship & Startups by Dr. G. M. Nair, Advisor, Kerala Biotechnology Commission. Director General of Police Loknath Bahra IPS, Former Inspector General Gopinathan IPS and SAI Director, Dr. Kishore took part in the event.

Achutha Menon memorial Academic & Research Management Block inaugurated

The new C. Achutha Menon memorial Academic & Research Management block at KAU main Campus was inaugurated by the Minister for Agriculture V. S. Sunil Kumar on October 27.

Speaking after the inauguration Minister said that the new 40,000 sq.ft Block built with ICAR funding is the fulfillment of a long cherished dream of the University.

The improved infrastructure facilities should encourage creative thinking and efficiency of research, the minister said. 'Government wants the University to lead an agricultural renaissance in the state. The enormous amount of research done and laudable results achieved should catalyse this. An action plan has already been drawn to strengthen the linkage between KAU and department of Agriculture,' he said.



Achutha Menon memorial Academic & Research Management Block at KAU Main Campus

Minister also laid the foundation stone for a new sports pavilion under state plan.

K. Rajan MLA presided over the function. Vice-Chancellor Dr. P. Rajendran welcomed the gathering and Registrar Dr. S. Leena Kumary proposed vote of thanks. K. V. Vijayadas MLA and Madakkathara panchayath president P. S. Vinayan offered felicitations. Members of the KAU General Council, LSGI representatives and officers and staff of the university participated.

(Cont'd from page 1)

One more edition of Pooppoli unfolded



Popularity of Pooppoli reflected by intense crowd turnout

Planting materials for the district will be produced at RARS. Pooppoli will be conducted from January 1 to 18 every year. ', he said. Minister also released the Pooppoli souvenir, Website and Facebook page.

I. C. Balakrishnan MLA presided over the function. C. K. Saseendran MLA honoured persons who played key role in successful conduct of Pooppoli. LSGI heads, People's representatives and KAU officials participated. RARS head Dr. P. Rajendran offered welcome and KVK head Dr. Safia N. proposed vote of thanks.

The inauguration of Pooppoli 2018 was also done by Minister for Agriculture V. S. Sunil Kumar.

In his inaugural address., the Minister said that an international floriculture symposium will be held at Ambalavayal

in March and an area of ten hectares in RARS will be set apart for research on floriculture. In addition it has also been decided to host an international jack fest at Ambalavayal., he said.

Minister said that steps have been initiated to ensure the quality of planting materials reaching farmers. 'KAU has initiated a process of fixing bar code to materials produced in its farms. The procedure is to begin from Ambalavayal RARS. Department of Agriculture will procure planting materials only from government agencies, PSUs and KAU.', he said.

KAU Vice-Chancellor Dr. R. Chandrababu in his welcome address highlighted the potential of cut flowers export and economic importance of Horticultural entrepreneurship. He also honoured six lead farmers from Wayanad district.

I. C. Balakrishnan MLA presided over the inaugural function attended by District judge Dr. V. Vijaya Kumar, District Panchayat President Ushakumari,

Ambalavayal Panchayat president Seetha Vijayan, KAU General Council member Cheruvayal Raman, KAU Registrar Dr. S. Leena Kumary, Director of Research Dr. P. Indiradevi, Director of Agriculture M. Sunil Kumar, people's representatives and farmers.



Vice-Chancellor Dr. R. Chandrababu honours Cheruvayal Raman, National Plant Genome Savior Award winner

Message from the Vice-Chancellor

DOUBLING FARMERS' INCOME- LET'S RISE TO THE OCCASION

Agricultural researchers in general and KAU scientists in particular have a key role to play in doubling farmers' income. Understanding the ground realities and piecing together a viable strategy is the challenge before us.

Agricultural scenario in Kerala is different from rest of the India in many ways. Kerala agriculture is confronted with multiple challenges - fragment farms, assorted cropping patterns, diverse agro climatic conditions, geomorphic variations, socio economic factors, unprecedented climatic fluctuations etc. Abundance of home gardens, traditional wisdom, affinity towards science and a better level of perceptual ability on account of higher literacy are encouraging factors while water scarcity, decline in crop area and withdrawal of traditional farmers are impediments.



Though the average gross income of Rs. 11888/- enjoyed by an agricultural household in Kerala is much higher than the national average of Rs. 6426/-, the net receipt of Rs. 4106/- from agriculture and allied fields is lower than that of agriculturally developed states. This requires a comprehensive action plan for enhancement of farmers' income. At the same time, the micro nature of farms and varied cropping patterns calls for customized and specific technology support. Thus the strategy for Kerala needs to be different from other parts of the country.

Conversion of land, both arable and fallow, for nonagricultural purposes is a general tendency that needs to be arrested. Another notable trend is the shift from food crops to cash crops, which is mainly attributed to the conversion of paddy fields to coconut and rubber plantations because these perennial crops are more remunerative and relatively less labour demanding. The long term effects of this conversion on food self-sufficiency and ecological issues demands a reversal and revival of paddy fields and associated water bodies thus become a priority.

The primary aim of intervention should be the development of a socially, economically and environmentally sustainable system. The strategy should also ensure self-sufficiency in food production, food safety and nutritional security, enhanced livelihood security of farming fraternity and conservation of natural resources. Harmonious integration of crops and cropping systems will be an ideal platform for launching the strategical interventions. Popularising already developed high yielding and stress tolerant crop varieties in suitable locations, developing new hybrids, cultivation of pulses and millets as intercrops, promoting of specialty rice varieties, revival of sesame cultivation in Onattukara tract, employing scientific nutrient management of crops, ensuring optimum utility of produces through proper post-harvest techniques, encouraging integrated farming systems etc., are feasible interventions for an inclusive strategy. A market intelligence mechanism to help farmers with accurate price prediction and regional storage facilities coupled with marketing windows are other essential support mechanisms. Value addition of farm produces will further increase income.

KAU has to increase the production of seeds and planting materials of high yielding, stress tolerant varieties and hybrids of field and horticultural crops. The release of twenty three new crop varieties including saline tolerant rice cultures will impart thrust to such activities. Familiarizing farming community with new varieties and technologies should also be taken up in collaboration with line departments. Our strong extension network can achieve more vibrancy by fostering a stronger bonding with departments and the present atmosphere is extremely congenial for it. Let's make more vigorous efforts to acquaint our farming fraternity with the vast menu of technologies designed for their benefit and help them choose the best option.

Science is not a retrograde step: Minister

Scientific introspections and corrections are as important as other research interventions, said minister for agriculture V. S. Sunil Kumar.

Speaking after inaugurating the curtain raiser programme of Kerala Science Congress and policy workshop on organic farming: field realities and strategies held at KAU's College of Forestry, Vellanikkara on, Minister said that science is a journey of progress and it corrects its own mistakes and practices through scientific interventions.

'We have to explore the possibilities of restoring the virtues of nature.', Minister said. 'If green revolution affected health of our soil or obliterated indigeneous varieties, we have to restore those treasures and we have to develop technology for that. Harnessing technology to suit our needs is the challenge. Correction is not a retrograde step, and we do it whether in case of plastic or pesticide. '

Sunil Kumar also called for varieties, breeds and practices to promote organic farming. ' Organic farming is not something to be laughed at or praised with romantic discourses. Scientists should come up with technologies to promote organic farming. Without technical back up no farming model will flourish.', he said.

KAU Vice-Chancellor Dr. R. Chandrababu in his presidential address high lighted the need to adopt scientific practices for healthy farming. 'While enhanced production is needed to ensure food security, food safety and nutritional security are factors of equal importance. We are also bound to ensure purity of natural resources and indulge in responsible



Minister addressing policy workshop on Organic Farming at College of Forestry

production and consumption, which guarantees calorific and nutritional requirements. Sustainability depends on sustaining pursuit of sustainable goals.', he said.

K. Rajan MLA inaugurated a Silviculture Museum in the College. Director of Research Dr. P. Indira Devi, Director of Extension Dr. Jiju P. Alex and Dr. Binooja Thomas from KSCSTE briefed the programme of science congress. Forestry faculty Dean Dr. K. Vidyasagan welcomed the gathering and Dr. A. V. Santosh Kumar proposed vote of thanks. Stake holders in organic farming from different parts of the state participated in the workshop jointly organised by KSCSTE and KAU's Centre for Excellence in Environmental Economics.

GI Tag for more products in the offing : VC

Vice-Chancellor Dr. R. Chandrababu has said that KAU will strengthen activities to protect Intellectual property rights of unique products from the state as well as that of newly developed rice varieties with flood, drought and salinity resistance.

Speaking after inaugurating the one day sensitization programme on GI tag for Nilambur Teak held at Forestry college, the Vice-Chancellor highlighted the genetic diversity in Western Ghats and unique agricultural products from Kerala State.

Dr. Chandrababu stressed the need for team work in achieving the goals in IP protection and appreciated the scientists of IPR Cell, staff and students of College of Forestry and members of Nilambur Teak Heritage Society for efforts to obtain GI registration of Nilambur teak.

The long cherished dream of making Nilambur Teak the first forest wood to get GI tag was realised by three year long efforts by KAU IPR Cell in association



Vice Chancellor Dr. R. Chandrababu inaugurates one day sensitization programme on GI tag for Nilambur Teak

with College of Forestry, Kerala Forest Research Institute, Kerala Forest and Wildlife Department and Nilambur Teak Heritage Society.

Director of Planning Dr. T. Pradeep Kumar unveiled the logo of Nilambur teak in the function presided over by the Director of Research Dr. P. Indiradevi.

General Council members Dr. S. Estelita, Dr. Sakkir Hussein, P. K. Sreekumar and Bibin Chacko participated. Dr. C. R. Elsy, Dr. E. V. Anoop and Dr. T. K. Kunhamu handled technical sessions. Forestry Faculty Dean Dr. K. Vidyasagan offered welcome and Dr. S. Gopakumar proposed vote of thanks.

Pattambi RARS Completes 90 Years

The 90th Anniversary of RARS, Pattambi was inaugurated by Minister for Agriculture V. S. Sunil Kumar on October 14, 2017.

Appreciating the research back up provided by RARS to the farming community, the minister called for development of high yielding varieties so as to boost productivity. 'Instead of lamenting on the depletion of arable lands, we have to work for enhancing production. Productivity enhancement will have to be complimented by utilizing fallow lands in all panchayats. It may be done either by the owners themselves or by Farmer groups, by taking it on lease.', he said.

K. Krishnan kutty MLA inaugurated an exhibition of agricultural implements and products in the function presided over by Vice-Chancellor Dr. P. Rajendran. Block Panchayat President Kammukutty Edathol, Municipal Chairman Muhammed Rasheed, Grama Panchayat President Murali, GC member Dr. Sakkeer Hussein, KAU Registrar Dr. S. Leena



Minister inaugurates the 90th Anniversary of RARS, Pattambi

Kumary, Director of Research Dr. P. Indira Devi, Director of Extension Dr. Jiju P. Alex, Principal Agricultural Officer Jessy, ATMA Project Director Irine and Associate Director of Research Dr. M. C. Narayanan Kutty participated.

Republic Day Celebrated

KAU Vice-Chancellor Dr. R. Chandrababu has called upon agricultural scientists to strive for developing measures for adaptation and mitigation of perturbations in climate which have upset our traditional cropping systems.



Addressing a Republic Day parade at the University Head Quarters, Dr. Chandrababu said that KAU is bound to extend technology support to Haritha Keralam mission. 'Our priority should be to improve natural resource use efficiency for sustaining the productivity gains achieved. Conservation of our vast natural wealth and traditional values is one important aspect of nation building. Risks precipitated by climate change being multi-faceted, their management too demands a multi disciplinary approach.', Vice-Chancellor said.

University officers, staff, students and labourers participated in the parade held at Vellanikkara. Republic Day celebrations were organised in all colleges and Research stations under KAU.

Plants for dye production Identified

KAU has identified plants for manufacturing natural textile dyes, facilitating a return to natural dyeing and escape from hazards of chemical dyes.

The study undertaken as part of a WGDP funded project at CoA, Vellayani, has identified twelve indigenous plants capable of giving colour to textiles- Cotton and Silk. The technology for using these plants for commercial textile industry has also been standardised under another project sponsored by RKVY.

This has opened up the possibility of using indigenous plants as dye yielders. The hazardous effects of chemical dyeing and chemical dye manufacturing had provoked a rethinking and ways to return to natural agents for

dyeing were being explored. KAU technology will be of great value in development of ecofriendly and safe clothing especially for newborn babies and people allergic to synthetic dyes. The biochemical properties of these natural dye compounds have also been deciphered, so as to identify the biomolecules in them.

According to, Dr. G. Jayalakshmi, Principal Investigator, twelve natural dyes with five different mordants have been screened. All silk and cotton material dyed with these pigments were tested in South Indian Textile Research Laboratory for colour fastness to light and stability to washing. Through this analysis combinations of natural dye and natural mordant with good stability have been identified.

Workshop on IP Protection

A one day workshop on IP protection of trait specific germplasm and traditional varieties organised by KAU IPR Cell was inaugurated by Plant Genome Saviour Award winner and General Council member Cheruvayal Raman.

In his address Raman said that most pertinent question in contemporary farming is the ownership of Seeds and varieties. 'Having been involved in farming for almost sixty years, I have never considered seed as a commodity. I never sold it for money. I also believe that farmer, who produce food, should be honoured along with parents, teachers

and doctors for the most vital contributions to our life.' He said

KAU Director of Research Dr. P. Indira Devi presided over the function. Registrar Dr. S. Leena Kumary delivered keynote address. She highlighted the importance of seed as the most basic and crucial factor of farming.

Members of the General Council Dr. B. Suma, Dr. K. Aravindakshan, Dr. Sakkir Hussein and P. K. Sreekumar, Director of Extension Dr. Jiju P. Alex, IPR Cell coordinator Dr. C. R. Elsy and ARS head Dr. A. Latha spoke. The inaugural session was followed by technical lectures on IPR issues and parameters.

Agro clinic a flagship programme : Minister

The monthly agro clinic and farm advisory programme initiated by Directorate of Extension was inaugurated by Minister for Agriculture V. S. Sunil Kumar on November 23.

In his address minister said that convergence of activities by different research organisations and line departments is essential for progress.

'Farmer-scientist interface is a well thought out programme to link the stakeholders for promotion of agriculture. The presence of farmers, extension officers and experts on a common platform bonds the triangular relationship to foster productivity and farmers' income. The earnest efforts of KAU scientists and department officers and warm response from farming community emanates positive signals. This flagship programme compliments



Minister V. S. Sunil Kumar interacts with farmers came for Agro clinic

Government's initiative on file to field and lab to land and it may soon become a national model. I appreciate the programme and those who conceived it. Scheduling regular visits of such expert panels to major agricultural zones would also be a welcome step,' he said.

K. Rajan MLA, in his presidential address highlighted the need for more such popular programmes so that farmers realise that KAU is supportive and responsive.

Agricultural Production Commissioner and Acting Vice-Chancellor Teeka Ram Meena IAS in his key note address said that strengthening the bond between farmers and farm scientists is the need of the hour and the interface is a welcome step in the right direction. Consumerism should not impede agricultural progress., he said. Teeka Ram Meena also released video CDs on Agriculture for social media streaming.

Director of Research Dr. P. Indira Devi presented the expert panel recommendations. Principal Agricultural Officer Abdul Majeed explained the project. Agricultural Faculty Dean Dr. A. Anil Kumar, Director of Extension Dr. Jiju P. Alex, Director of Planning Dr. T. Pradeep Kumar and Communication Centre head Dr. Binoo P. Bony spoke.

Spread awareness on Climate Change: MP

C. N. Jayadevan MP has highlighted the pertinence of spreading awareness on climate change mitigation measures.

In his inaugural address at the seminar on Change in Climate-Change in agricultural practices at Thrissur KVK on 4 December 2017, Jayadevan said that impact of climate change in agriculture is critical and hence public in general and farmers in particular have to be made aware of remedial measures. 'The rampant changes in climate has become a routine phenomenon affecting the food production and availability of food grains. Research on climate change and mitigation measures is very important, but equally or more important are the awareness programmes. I congratulate KVK and Field Publicity wing for joining hands for this genuine purpose,' he said.

Director of Extension Dr. Jiju P. Alex presided over the function. Field publicity Assistant Director K. A. Beena, KVK head Dr. A. Prema and Field publicity officer Sudhakara spoke. Dr. George Thomas handled the class on change in cropping patterns due to climate change and Deepa S. Pillai talked about agricultural development programmes of NABARD.

International Jackfest

Global Research Centre mooted

Minister for Agriculture V. S. Sunil Kumar has mooted an international research centre for Tropical fruits at Ambalavayal.

He was speaking after inaugurating the International workshop on Production, Value addition and Marketing of jackfruit organised by KAU in collaboration with Department of Agriculture, TFnet, Malaysia and ICAR.

'This workshop should be a beginning, not an end. We want to promote value addition and marketing of jackfruit, and other tropical fruits also for that matter, and the international tie up and interaction during this workshop will be a catalyst for setting up a global research centre here. Help and support of union government will be sought to promote jackfruit, a natural and unadulterated fruit with nutritional and medicinal properties,' Minister said.

KAU Vice-Chancellor Dr. P. Rajendran, in his presidential address, said that the



Minister V. S. Sunil Kumar inaugurating the International Jackfest at Ambalavayal

event hosted by the University has facilitated sharing of knowledge, expertise and experience.

C. K. Saseendran MLA, Agricultural Production Commissioner Tikkaram Meena IAS, District Judge V. Vijaya Kumar, TFNet CEO Mohammed Desa Hassim, KAU Officers, LS GI representatives and farmers participated. The technical sessions of international workshop was attended by an array of renowned experts.

Tale of Two museums at College of Forestry

The Silvicultural Museum and timber museum at KAU's College of Forestry impart enticing lessons on forests and forestry.



Minister V.S. Sunil Kumar and K. Rajan MLA keenly watching the Silviculture museum at CoF

The Silvicultural Museum in the Dept. of Silviculture and Agroforestry, opened by K. Rajan MLA in the presence of Minister V. S. Sunil Kumar and Vice-Chancellor Dr. R. Chandrababau on January 10, provides information about scientific tree farming techniques and spread awareness on the challenges confronted by forests and agricultural sector and the possible options for their revival.

The Museum portrays historical perspectives of forests in Kerala with rich forest treasure shrinking to nominal

area. The unscientific land use changes posing serious threats to the agricultural prosperity through drastic reduction in the water yield from the Western Ghats, the need for the conserving remaining forests to maintain ecological balance and hydrological functioning is highlighted here.

Need to enhance tree farming outside the conventional forest areas and its economic as well as ecological benefits are delineated. Pictorial representation of suitable agro forestry models, ideal tree species for farm forestry and agro forestry, Scientific tree cultivation practices and nursery techniques for production of healthy tree seedlings, their planting design, staking and alignment, pit making and pest and disease management of various forest tree species are also well explained, according to Dr. T. K. Kunhamu, Head, Department of Silviculture and Agroforestry.

Timber museum and xylarium

The Timber Museum and Xylarium is housed in the department of Forest Products and Utilization headed by Dr. E. V. Anoop. Timber discs and wood specimens of 145 species of forest trees from within the country as well as from abroad are exhibited here. This is

complemented by state-of-the-art facilities for accurate identification of timber specimens sent by various departments, agencies and the public.

The department also undertakes Wood Quality Assessment of timbers using conventional and Non-destructive testing (NDT) methods using acoustic tools. It also acts as a special training facility for the students and technicians with emphasis on training in frontier areas in Wood Science such as tissue processing, microtome, and microscopy. A Coconut Wood Technology Demon-



A view of Timber Museum at CoF

stration Centre (CWTDC) attached to the department offers special training facility for the students and technicians to encourage processing of coconut palm wood.

Call to Merge Modern Techniques and Traditional knowhow

The two day seminar on Spices in Urban Horticulture conducted by Department of Plantation crops, CoH at Model spice nursery, Vellanikkara was inaugurated by C. N. Jayadevan MP.

In his inaugural address Jayadevan highlighted the need for linking traditional wisdom with modern practices. 'KAU's initiatives to equip farming community with modern technologies and advanced techniques has been fruitful. Taking horticulture to urban areas is a welcome initiative which would change the atmosphere in urban colonies.', he said.

KAU Executive Committee member K. Rajan MLA presided. Dr. Homy Cheriyan, Director, Directorate of Arecanut and Spices, Dr. George Thomas, Associate Dean, CoH and Dr. P. V. Nalini, Head, Department of Plantation crops spoke. Director of Research Dr. P. Indira Devi offered welcome and Dr. Mini Raj proposed vote of thanks.

Seminar on Cocoa farming

Minister for Agriculture V. S. Sunil Kumar has said that varieties, agro techniques and processing technologies developed by KAU Cocoa research station will be popularised.

Speaking after inaugurating the seminar organised by the Cocoa research station at Vellanikkara on January 29, the minister pointed out that the ongoing research collaboration between KAU and Cadbury is an exemplary example of highly successful and sustainable public-private partnership. Such collaborations have to be promoted, he said.

Vice-Chancellor Dr. R. Chandrababu, in his presidential address said that Cocoa has regained the popularity among the Indian farmers on account of a reasonable return, regular income,

remunerable prices and the ease in management.

'KAU has been leading cocoa research in the country for a long time and 90% of cocoa cultivation in India is established with our cocoa hybrids. Cocoa has gained acceptance as one of the most compatible intercrop in coconut, arecanut, rubber and oil palm plantations.', he said.

Madakkathara panchayath president P. S. Vinayan, KAU General Council members Dr. A. Anilkumar, Dr. T. Pradeep Kumar, P. K. Sreekumar and Dr. Sakkir Hussein, Director of Research Dr. P. Indira Devi, Director of Extension Dr. Jiju P. Alex and Cocoa research station head Dr. B. Suma spoke. The inaugural session was followed by technical sessions on cocoa farming.