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Hon'ble Vice Chancellor's Message

Quinoa the Future Food

India is the world's second largest producer of Rice, Wheat and other cereals. The huge demand for cereals in the global market is creating an excellent environment for the export of Indian cereal products. The global population is expected to increase to 9.7 billion in 2050 and food production will need to go up by about 60 per cent. Several regions already suffering from malnutrition, water scarcity and soil degradation have been forecast to have a large population growth which raises serious concerns about whether traditional agricultural methods and crops species will have the capacity to sustain global food production targets.



Major cereal crops like wheat, rice, barley and corn are progressively failing to withstand increasing salinity and scarce water resources in marginal environments that are most vulnerable to climate change. Therefore, there is an urgent need to identify alternative solutions to sustaining, and possibly, increasing agricultural productivity in areas where growing traditional crops has become difficult and sometimes uneconomical.

Quinoa (Chenopodium quinoa, or goosefoot) is one of the potential alternative of present cereals. It is "pseudo-cereal" that are cooked & eaten like grains and have a similar nutrient profile. Botanically, quinoa is related to beets, chard and spinach, and over 120 different varieties of quinoa are known, but the most commonly cultivated and commercialized are white, red and black quinoa.

Quinoa is one of the only plant foods that's a complete protein, offering all the essential amino acids in a healthy balance contains all nine essential amino acids – including the elusive lysine and isoleucine acids, which most other grains lack. It has high ratio of protein to carbohydrate, since the germ makes up about 60 per cent of the grain. It is more nutritious option for gluten free diets, useful in reducing the risk for diabetes. Quinoa is also highest of all the whole grains in potassium, which helps to control blood pressure. In recent years, foodies in the UK and the US have heralded it as a superior alternative to bulgur wheat, couscous and rice. Despite the growing global recognition of quinoa's potential, and positive research outcomes in pilot studies, there are still many constraints and issues to be addressed before quinoa becomes a crop of choice in marginal areas where other major crops have so far been dominant but are now failing due to climate change and degradation in the quality of soil and water resources.

Fifteenth Annual Convocation

JAU celebrated fifteenth annual convocation with great joy and enthusiasm on December 27, 2019 at Sardar Patel Sabhagruh, JAU, Junagadh. The campus was adorned on this grand auspicious function of prime activity, education.

Shri Acharya Devvrat *ji*, Hon'ble Governorshri and Hon'ble Chancellor of the University graced the function as President. Shri Jaydrathsinh Parmar, Hon'ble Minister of Agricultural (State), Panchayat, Environment (Independent Charge) attended the function as Guest of Honour. Dr. Mahadev B. Chetti, Hon'ble Vice Chancellor, University of Agricultural Science, Dharwad (Karnataka) was chief guest of this function. The convocation program was began with start procession including dignitaries, members of Board of Management and members of Academic Council.



The function was started with welcome address by Dr. V. P. Chovatia, Hon'ble Vice Chancellor of JAU. He presented the glimpses of activities and achievements of JAU for the period of 2018-19 and the remarkable multifaceted success in teaching, research and extension activities which impressed the audience.



A total 65 Gold Medals/Gold Plated Silver Medals including 3 Chancellor's Gold Medals, 4 Vice Chancellor's Gold Medals, and 56 Donors' Gold Plated Silver Medals as well as 2 cash prize were awarded to 17 graduate and post graduate students of different faculties for their brilliant academic performance.



On this highest academic occasion, the best teacher award was given to Dr. B. N. Kalsaria, Associate Professor, Department of Agricultural Extension, College of Agriculture, Junagadh for academic year 2018-19. Three publications prepared by scientists were also released by Shri Acharya Devvrat *ji*, Hon'ble Governorshri and Hon'ble Chancellor of the University.



Shri Jaydrathsinh Parmar, Hon'ble Minister of Agriculture (State) appreciated achievements of JAU and highlighted the scope and challenges in agriculture sector in Gujarat. He gave an account of fascinating achievements in agricultural development of state supported with facts and figures.



Dr. Mahadev B. Chetti, Hon'ble Vice Chancellor, University of Agricultural Science, Dharwad (Karnataka) and Chief Guest of function delivered convocation address. He ignited the minds of the scientists, teachers and students of JAU in taking Indian agriculture to new horizons and emphasized to use their skill and expertise for the Hon'ble Prime Minister Shri Narendra Modi's flagship programme

"Doubling the Farmers' Income by 2022" to mark 75 years of India's independence. This is a major shift in our approach, a clear focus on farmers and farmers' welfare, rather than simply production and productivity. He advised the Graduates to apply knowledge into action and bring more accuracy and perfection in given task which ultimately bring joy and happiness in Indian farming community.



Shri Acharya Devvrat *ji*, Hon'ble Governorshri of Gujarat and Hon'ble Chancellor of University conferred degrees to Graduates and Post Graduate students of various faculties of JAU. The Chancellor appreciated students for their Academic Excellences and asked them to bring innovations in agriculture to serve the farming community.



Dr. P. M. Chauhan, Registrar followed the prescribed procedure of convocation. He proposed vote of thanks to dignitaries, members of Board Management, Academic Council and Board of Studies of JAU, Government officials of Junagadh, Leaders, all the guests and students of JAU.

Inauguration of Artificial Intelligence Lab

Shri R. C. Faldu, Hon'ble Minister for Agriculture, Rural Development and Transport, Government of Gujarat inaugurated Artificial Intelligence (AI) Laboratories developed at College of Agricultural Engineering and Technology, JAU, Junagadh under the flagship program of NAHEP-IDP on October 4, 2019. Dr. A. R. Pathak, Hon'ble Vice Chancellor, JAU, Junagadh, Dr. V. P. Chovatia, PI (IDP) and Director of Research; Dr. V.V. Rajani, Director of Extension

Education; Dr. N. K. Gontia, Co-PI (IDP) and Principal & Dean, CAET, JAU, Dr. P. M. Chauhan, Co-PI (IDP) and Registrar, Deans of various faculties and faculty members of JAU, Junagadh remained present during the inaugural ceremony.



The major aim behind development of AI laboratory is to get acquainted with advanced technologies such as artificial intelligence, robotics, drones and sensors and to provide advanced education to agriculture students which is a demand of the hour that how our peasants can easily adopt modern technology so that agriculture does not become burdensome and inferior. Moreover, it becomes more accessible and economically productive. Hon'ble Minister has appreciated the facilities developed in the laboratories for the students and research. He also took deep interest in the AI based projects developed by the students during various vocational trainings of IDP and encouraged the students.

Inauguration of Mahatma Gandhi Boys' Hostel

Shri R. C. Faldu, Hon'ble Minister for Agriculture, Rural Development and Transport, Government of Gujarat and Shri Babubhai Bokhiria, Hon'ble MLA, Porbandar inaugurated newly constructed "Mahatma Gandhi Boys' Hostel" on October 4, 2019 at Khapat (Porbandar). Dr. A. R. Pathak, Hon'ble Vice Chancellor of Junagadh Agricultural University, Dr. V. P. Chovatia, Director of Research and Dean, PG Studies, JAU, Junagadh and other guests graced the occasion.



Annual Group Meeting of AICRP-IFS

Annual group meeting of AICRPs on Integrated Farming System (IFS) was jointly organized by Junagadh Agricultural University, Junagadh and ICAR-IIFSR, Modipuram from November 27-29, 2019 at JAU, Junagadh under the chairmanship of Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU, Junagadh. Inaugural function was presided by Dr. A. S. Panwar, Director, ICAR-IIFSR, Modipuram. Shri Dhirubhai Gohel, Mayor, Junagadh Municipal Corporation, Dr. T. Radhakrishnan, Director, DGR, Junagadh and Shri Mahindar Pratap Singh Pawar, DIG, Junagadh remained present in this meet.



During this meeting, action taken report, progress of onstation and on-farm research review of scheduled tribe/scheduled caste sub plans presentation were made by concerned chief agronomist and agronomist of the centre during the different technical sessions.

One special session of discussion on technical administration and financial recommendations of QRT, approaches and requirements for new SFC (2020-2025) and general administrative and financial issues were also discussed. Plenary session was chaired by Dr. A. S. Panwar, Director, ICAR-IIFSR. Six recommendations of on-station research and five recommendations of onfarm research were finalized. The scientist visited IFS Model developed at FSR Farm, University Central Museum and Bio Fertilizer Laboratory and Production Unit (*Tricoderma harzianum*) of the University.

Training Programmes under IDP-NAHEP

Vocational Training Programme on "Autopilot Drone Development"

The IDP Cell, College of Agriculture, JAU, Junagadh has organized five days vocational training programme on "Autopilot Drone Development" during November 5-9, 2019 for 50 students of B. Sc. (Hons.) Agriculture under the Institutional Development Plan sponsored by the Edux Labs, Gurugram. This training programme included the lectures related to autopilot system, working principle, control flow in autopilot system, power flow in autopilot system, choosing flight controller based on flight need, autopilot system integration, software and driver installation, calibration techniques, stability techniques, components of autopilot system, flight controller, GPS Module,

electronic speed controller, working principle, pulse width modulation techniques, MOSFET in autopilot drone sectors. The last two sessions of the vocational training programme were exclusively allotted to handson experience for the participants with drones and autopilot boards sessions. All the training sessions were handled by Mr. Pranav Kumar and Mr. Aniket Deore, trainer of Edux Labs, Gurugram. The programme was organized under the guidance of Dr. V. P. Chovatia, Hon'ble Vice-Chancellor, Director of Research and Principal Investigator (IDP), Dr. P. Mohnot, Project Nodal officer, Dr. B. K. Sagarka, Principal, College of Agriculture and Dr. D. K. Varu, Organizing Secretary of the training programme and Professor & Head, Department of Horticulture, College of Agriculture, JAU, Junagadh.



Vocational Training on "Application of One Health Concept for Control of Emerging Zoonoses and Health Threats

Vocational training on "Application of One Health Concept for Control of Emerging Zoonoses and Health Threats" was organized during October 14-18, 2019 by the Department of Veterinary Public Health and Epidemiology, College of Veterinary Science and A. H., JAU, Junagadh under the aegis of IDP, ICAR funded by the World Bank. There were five technical sessions which included 18 technical lectures comprising demonstration of advanced technical instrument and training modules. Ninety-eight students of B. V. Sc. & A. H. participated in the programme. The programme began with an inaugural session followed by the technical sessions. The eminent teachers, scientists, researchers and technical personals from various Universities, National Institutes and Industries were invited to address the participants in the areas of "One health concept for the control of Zoonoses and Health threats"



Vocational Training on "New Approaches and OMICS Tools for Identification and Control of Ticks and Tick-Borne Diseases"

Department of Veterinary Public Health and Epidemiology, College of Veterinary Science and A. H., JAU, Junagadh under the aegis of IDP, ICAR funded by the World Bank organized vocational training on "New Approaches and OMICS Tools for Identification and Control of Ticks and Tick-Borne Diseases" during November 18-22, 2019. The ninety-two students of B. V. Sc. & A. H. participated in the programme. The training programme covered 18 technical lectures including demonstration of advanced research techniques such as DNA isolation, PCR, qPCR, LAMP, Acaricide resistance detection assay, sequencing techniques etc. The eminent teachers, scientists, researchers and technical personals from various Universities and National Institutes such as ICAR-IVRI, Izatnagar; ICMR-NIRTH, Jabalpur; TANUVAS, Chennai; GADVASU, Ludhiana; MAFSU, Nagpur, LUVAS-Hissar addressed the participants about "Recent advancements in Identification and Control of Ticks and Tick-Borne Diseases". During the inaugural session, Dr. V. V. Rajani, Director of Extension Education, JAU, Junagadh presided over the function with motivational remarks. Dr. K. S. Prajapati, Retd. Professor and Head, Veterinary Pathology, AAU, Anand remained present as Chief Guest of the function and Dr. N. K. Singh, Associate Professor, Department of Veterinary Parasitology, Veterinary College, GADVASU, Ludhiana and Dr. H. V. Manjunathachar, Scientist, ICMR-NIRTH, Jabalpur, were the Guest of Honor. Dr. Deendayal Garg, Incharge Principal, Veterinary College, Principal and Deans of various colleges along with other delegates graced the function with their presence. The programme was organized under the direct guidance of the Hon'ble Vice Chancellor, JAU, Junagadh Dr. V. P. Chovatia and Principal and Dean, Veterinary College, Junagadh Dr. P. H. Tank. Dr. Binod Kumar, Assistant Professor and Head, Department of Veterinary Parasitology and Organizing Secretary of the programme proposed vote of thanks to all for cooperation and successful completion of the training.



Training Programme Organized

Training programme on "Bio-rational Approaches for Plant Disease Management" was organized by Department of Plant Pathology, College of Agriculture, JAU, Junagadh for the benefit of 44 students of B.Sc. (Hons.) Agriculture during November 11-15, 2019. Theoretical and hands-on training sessions were scheduled in such a way that students gain both knowledge and skills in plant disease management. The programme was organized under the guidance of Dr. V. P. Chovatia, Hon'ble Vice-Chancellor; Dr. P. Mohnot, Project Nodal officer; Dr. B. K. Sagarka, Principal of the College of Agriculture and Dr. L. F. Akbari, Professor and Head, Department of Plant Pathology, College of Agriculture, Junagadh Agricultural University, Junagadh.



Celebration of Agricultural Education Day

"Agricultural Education Day" was celebrated on the birth anniversary of first President of India and first Union Minister of Agriculture of India, Dr. Rajendra Prasad at College of Agricultural Engineering and Technology, JAU, Junagadh on December 3, 2019. On this occasion, a quiz competition was organized on General knowledge of Agriculture. Further, two students; Ms Rucha Kolambe and Ms Charmiben Patel delivered lectures on related topics. The winners of the quiz competition were appreciated by awarding the prizes. About 150 students and 20 faculty members benefited with the programme.

Celebration of World Food Day

"The World Food Day" was celebrated at College of Agricultural Engineering and Technology, JAU, Junagadh on October 16, 2019. A technical session and an awareness campaign program were organized as a part of celebration by Department of Processing and Food Engineering and Students' Representative Council. Dr. M. N. Dabhi, Organizing Secretary and Professor & Head, Dept. of PFE welcomed all the guests and threw some light on importance of Food Processing and reduction of Food Waste. Two PG students; Er. Prakash Sirwani and Er. Nirav Joshi, delivered an informative presentation on the theme of "Our Actions are Our Future, Healthy Diets for A #ZeroHunger World". Dr. N. K. Dhamsaniya, Principal, Polytechnic in Agro-Processing, JAU highlighted the theme of

World Food Day with his expertise. Dr. V. R. Malam, Director of Students' Welfare motivated the students and faculty to consume healthy food and not to waste food to change the world in to #ZeroHunger World. Dr. N. K. Gontia, Principal & Dean blessed all by the motivational words of not to waste the food and to go for safe, healthy and hygienic food in life. Following the technical event, an awareness campaign was also organized on the streets of Junagadh in view to make the Street Food Vendors aware about the Food Safety, Hygiene and Cleanliness to be maintained in entire chain of food preparation to the serving of the consumer. About 50 Street Food Vendors of neighboring area of Motibaug, Junagadh were given a food hygiene kit containing a pair of hand gloves, a hair cap and nose mask with the pamphlet containing guidelines of food safety measures recommended by FSSAI Act 2006. The consumers available on Food Stalls were also motivated about the reduction of Food Waste. All the activities were carried out by the group of UG and PG students of CAET.



Celebration of Constitution Day

College of Agriculture, JAU, Khapat.

Constitution Day (National Law Day) was celebrated on November 26, 2019 at College of Agriculture, JAU, Khapat. There was a debate among faculty members and students of the college regarding constitution of India.

Post Graduate Institute of ABM, JAU, Junagadh

Constitutional Day celebration was organized at PGIABM on November 26, 2019. Dr. V. V. Rajani, Director of Extension Education, Dr. V. R. Malam, Director of Students' Welfare, Principal and Deans of various colleges and staff members remained present in the inauguration session of the tournament. The 'Rally' was also organized for staff members and students from PGIABM building to campus canteen.



Polytechnic in Agriculture JAU, Dhari

NSS unit of Polytechnic in Agriculture JAU, Dhari celebrated Constitution Day on November 26, 2019 to spread awareness about the Indian Constitution and to remember Dr. B. R. Ambedkar- the architect of the Indian constitution. Seventy-five NSS volunteers and faculty members participated in the celebration.

KVK, Amreli

Constitution Day, also known as 'Samvidhan Divas' was celebrated on November 26, 2019 and December 20, 2019 by KVK, Amreli. Awareness was created about constitution among the farmers and student by conducting rally, speech, debates, etc. by scientists of KVK Amreli. More than 120 participants participated in the various activities.

KVK, Nana Kandhasar

Constitution Day was also celebrated on November 26, 2019 and December 23, 2019 by KVK, Nana Kandhasar. During this event, meetings in KVK and nearby village were organized and created the awareness regarding Article 51-A of the Indian Constitution by KVK scientists among the farmers.

Celebration of "Sushasan Divas"

Main Dry Farming Research Station, JAU, Targhadia, Rajkot celebrated "Sushasan Divas" on December 25, 2019. On this occasion Shri R. C. Faldu, Hon'ble Minister for Agriculture, Rural Development and Transport along with Shri K. M. Bavaliya, Hon'ble Minister of Water Supply, Animal Husbandry and Rural Housing, Government of Gujarat; Shri Mohanbhai Kundariya, Member of Parliament (Rajkot), Shri Rameshbhai Dhaduk, Member of Parliament (Porbandar), Shri Arvindbhai Raiyani, Shri Lakhabhai Sagathiya and Shri Govindbhai Patel, Members of Legislative Assembly, Government of Gujarat were remained present.



Around 3000 farmers and farm women also remained present in this celebration. Dignitaries visited the research work carried out on dry farming, water conservation and water harvesting activities of the AICRPDA and seed production program of Main Dry Farming Research Station. Dignitaries congratulated the team of Main Dry Farming Research Station for such nice and useful research and extension works.

Tribute to Dr. B. R. Ambedkar

On *Nirvana Divas* of Dr. B. R. Ambedkar, a tribute offered by planting the trees at PGIABM on December 6, 2019. Dr. V. P. Chovatia, Hon'ble Vice Chancellor, Dr. V. V. Rajani, Director of Extension Education, Dr. V. R. Malam, Director of Students' Welfare, Principals of various Colleges and Polytechnics, faculty members, members of SC/ST cell of the University and students of PGIABM remained present at this occasion.

Thirty-First ZREAC Meeting

Zonal Research and Extension Advisory Committee (ZREAC) is functioning at Zonal level of South Saurashtra & North Saurashtra Agro-Climatic Zones and two meetings were organized during the year *viz.*, *kharif* and *rabi* summer. It is multidisciplinary task to evaluate the research results of different disciplines. The 31st (*Rabi-Summer*) meeting of South Saurashtra Agro-climatic Zone was held at JAU, Junagadh during October 18-19, 2019. In this meeting, one variety of brinjal Gujarat Round Brinjal–7 (GRB-7) was approved for the benefits of the farmers. Apart from varieties; 18 recommendations for farmers, 11 recommendations for scientific community and 32 new technical programmes were approved for *Rabi-Summer* season for South Saurashtra Agro-climatic Zone.



Agricultural and Food Processing Machinery Manufacturers' Meet

Agricultural and Food Processing Machinery Manufacturers' Meet was organized on November 27, 2019 at College of Agricultural Engineering and Technology, JAU, Junagadh by Department of Processing and Food Engineering in collaboration with Indian Society of Agricultural Engineers (ISAE), Gujarat Chapter and NAHEP-IDP programme. The inaugural function was graced by Dr. A. R. Pathak, Immediate Past Vice Chancellor, JAU as Chief Guest and Dr. Chetan Trivedi, Hon'ble Vice Chancellor of BKNMU, Junagadh, as Guest of Honour. Dr. N. C. Patel, Former Vice Chancellor, AAU (joined on video conferencing). Dr. P. Mohnot, ADR, JAU, Dr. N. K. Gontia, Principal & Dean, CAET, Dr. V. K. Tiwari, Head, Dept. of FMPE and President, ISAE Gujarat Chapter, Shri. S. K. Singh, Scientist E and Head at BIS,

Rajkot, Mr. B. Kumar, Food Consultant, Rajkot and Dr. M. N. Dabhi, Head, Dept. of PFE, CAET and organizing secretary remained present at this occasion. Dr. Nachiket Kotwaliwale, Principal Scientist & Head, CIAE, Bhopal and Dr. Pankaj Kumar, CIPHET, Ludhiana delivered the keynote speech. Officials from State Bank of India and Shri P. N. Vasara, JDA (Engg.), Gandhinagar also deliberated on Government policies and financial schemes for machinery manufacturers.



In the interaction session, it was discussed to form an 'Association of Agricultural and Food Processing Machinery Manufacturers'. MoU with four Agricultural and Food Processing Machinery Manufacturers namely, Bharat Engineering Works, Jasdan, Mech-Air Industries, Vadodara, Nice Engineering Works, Siddhapur and Chetan Agro Industries, Rajkot, were signed for in-plant training and technology transfer. More than 30 machinery manufacturers from all over Gujarat, 20 faculty as well as 70 UG and 35 PG students of Agricultural Engineering and Horticulture Colleges participated in the meet.

Our Valued Visitors

Visit of Shri Jaydrathsinhji Parmar, Hon'ble Minister of Agriculture (State level), GoG

Shri Jaydrathsinhji Parmar, Hon'ble Minister of Agriculture (State level), Panchayat, Environment (Independent Charge), Government of Gujarat, visited the Cattle Breeding Farm, JAU, Junagadh on December 27, 2019. Hon'ble Vice Chancellor Dr. V. P. Chovatia accompanied the visit. Scientific staff of Cattle Breeding Farm also remained present. Hon'ble Minister appreciated the progress achieved by Cattle Breeding Farm.



Visit of Dr. Vallabhbhai Kathiria, Chairman, Rashtriya Kamadhenu Ayog, GOI, New Delhi

Dr. Vallabhbhai Kathiria, Chairman, Rashtriya Kamadhenu Ayog, Govt. of India, New Delhi visited

Main Dry Farming Research Station, JAU, Targhadia on October 1, 2019. Dr. D. S. Hirpara, Research Scientist (Dry Farming) highlighted the research activities being carried out at the centre.



Dr. Kathiria visited the field and emphasized on organic farming especially cow-based farming. He also suggested to give more importance on recycling the organic waste and integrated farming system (especially the cow-based system) for future research programme. He appreciated the research activities carried out at the centre.

Visit of AICRP Monitoring team

AICRP on Cotton

AICRP monitoring team headed by Dr. D. Monga, Head, ICAR-CICR, RS, Sirsa; Dr. Paramjit Singh,

Director, PAU, RS, Bathinda; Dr. B. S. Nayak, Officer-in-Charge, ICAR-AICRP on Cotton, RRTTS (OUAT), Bhawanipatna; Dr. Rishi Kumar, Principal Scientist, ICAR-CICR, RS,



Sirsa; Dr. C Karpagam, Senior Scientist, ICAR-CICR, RS, Coimbatore visited Cotton Research Station, JAU, Junagadh and Amreli centre on November 4-5, 2019.

AICRP on Pigeonpea

Members of monitoring team constituted by Project Coordinator (Pigeonpea), IIPR, Kanpur visited Pulses

Research Station, JAU, Junagadh to monitor AICRP trials conducted during Kharif-2019. Dr. T. E. Nagaraja, Principal Scientist (Pulses), Bangalore and Dr. G.



Keshvareddy, Scientist (Entomology) visited on December 8, 2019 to monitor AICRP trials, breeding materials, breeder and nucleus seed production programme and FLDs on pigeonpea. They were satisfied with proper maintenance and weed free breeding, agronomical and pathological trials.

Training on Cotton Cultivation

A training programme jointly organized by Cotton Research Station JAU, Junagadh and Vardhaman Textile BCI to train the technical staff of Vardhaman Textile BCI on December 13, 2019. Hon'ble Vice

Chancellor Dr. V. P. Chovatia inaugurated the training. Dr. V. V. Rajani, Director of Extension Education and Dr. M. A. Vaddoria, Head of the Centre remained present. Various lectures were delivered on "Scientific Cultivation of Cotton" by the scientists of JAU, Junagadh.



Training on Vegetable Nursery Management and Cultivation

A nine days training programme on "Vegetable Nursery Management and Cultivation" was jointly organized by State Bank of India, Rural Self-employment Training Institute (RSETI) and Vegetable Research Station, JAU, Junagadh at Junagadh district jail for developing skills among rural youth and facilitate them to establish rural enterprises and secure sustainable livelihoods. Dr. V. V. Rajani, Director of Extension Education and delegates of SBI & RSETI remained present on inauguration of training programme. Certificates were issued to the thirty participants by Hon'ble Mayor of Junagadh Municipal Corporation on completion of this training programme.



Germplasm Day

A Germplasm Day was organized at Cotton Research Station JAU, Junagadh on December 12, 2019. Technical staff members of Rasi Seeds (P) Ltd.,



Ajeet Seeds Pvt. Ltd., Seed Works International Pvt. Ltd, Agriseed, Myhico seeds, Doctor seeds, Agri Top, Kaveri seeds, Nuziveedu seeds visited and observed germplasm material, released varieties and company's Bt. trials at cotton research station.

Inter-College, University level Cricket and **Chess tournament**

Inter-College, University level Cricket and Chess tournament was organized by Post Graduate Institute of

ABM, from November 21-23, 2019. Dr. V. V. Director Rajani, of Extension Education; Dr. V. R. Malam, Director of Students' Welfare; Principal & Deans



various colleges and staff members remained present in the inauguration session of the tournament. Students of various faculties enthusiastically participated into the tournaments.

Program on Systematic Voters' Education and **Electoral Participation**

NSS unit of Polytechnic in Agriculture JAU, Dhari organized program on "Systematic Voters' Education and Electoral Participation (SVEEP)" on December 12, 2019 to spread voter awareness and to promote voter literacy among the students. The program was attended by Voter Registration Officer & Deputy Mamlatdar Shri. T. I. Dubal and the Nodal Officer, Dhari Smt. Surabhi Paghdar; Dr. M. V. Ramdevputra, Principal and Shri M. G. Savaliya, Assistant Prof. polytechnic in Agriculture also remained present at the occasion. Campus Ambassador Parth Savaliya, student of second year and around 74 NSS volunteers actively attended the program and got benefit.

NSS Special Camp

NSS Special Camp was organised at Ambeshwar Dham (Mota Kajaliyala) by Polytechnic in Agro Processing,

JAU, Junagadh during November 11-17, 2019. During this seven days the volunteers camp, performed early the morning Yoga everyday. They cleaned the different



places of the village. A cultural programme was organised thematically on the importance of cleanliness in our day to day life, which was very much appreciated by villagers. Dr. N. K. Gontia, Dean, Faculty of Agricultural Engineering and Technology and Dr. N. K. Dhamsaniya, Principal, Polytechnic in Agro-Processing visited the camp. They observed the various activities and encouraged the NSS volunteers.

Celebration of Women Farmers' Day

KVK, Amreli

Women Farmers' Day was celebrated by KVK Amreli on Oct. 15, 2019. As a part of celebration, scientists provided information on value addition of various horticultural crops, irrigation management in rabi crops, use of plastic mulch, micro irrigation system, micro saving schemes and other social and technical issues related to women in general and agricultural field. Total 98 farm women participated in this event.

KVK, Jamnagar

KVK, Jamnagar and ATMA Jamnagar jointly organized

Mahila Kisan Divas at Panjrapol, Jamjodhpur. During this programme, lectures were arranged gardening, kitchen on value addition, income generation activity, organic



farming, drudgery reduction technology and IPM in vegetable crops. 93 farm women and 51 farmers actively participated in this programme.

KVK, Khapat

Mahila Kisan Divas was also celebrated at Krishi Vigyan Kendra, JAU, Khapat. Lectures were delivered by various scientists on different topics like; drudgery reduction in farm women; care of cattle & buffaloes, etc. Total 84 farm women participated in this programme.

KVK, Nana Kandhasar

KVK, Nana Kandhasar celebrated Mahila Kishan Diwas to recognize the invaluable contribution of women in agriculture. Scientists of KVK delivered the talk on role of women in agriculture. More emphasis was given to adopt scientific technology in agriculture. Mrs. Ritaben Rathod (Project Officer), Centre for Environmental Education delivered lecture on 'Health and Nutrition Security for Rural Women'. Total 38 women farmers of Bhetsuda Village of Surendranagar district participated in the celebration.

Celebration of World Soil Day

KVKAmreli

The World Soil Day with campaign "Stop soil erosion-Save our future" is envisaged to raise awareness on the importance of sustaining healthy ecosystems and human well-being. The World Soil Day was celebrated on Dec. 5, 2019 by KVK, Amreli at Haripura, with a view to create mass awareness among farmers about soil health, soil testing, soil sampling, importance of soil health card, fertilizer application and effect of soil health on crop production. Various activities were organized like; Kisan Sangosthi on soil health, farmers training and method demonstration. Total 120 farmers participated in the celebration.

KVK, Khapat

"World Soil Day" was celebrated at KVK, JAU, Khapat (Porbandar). On this occasion, scientists delivered lectures related to soil fertility. Soil health cards were distributed to the farmers. Total 56 farmers and farm women participated in this event.

KVK, Nana Kandhasar

The scientists of KVK, Nana Kandhasar celebrated the

World Soil Day at Doliya Village of Surendranagar district. The celebration was attended by 47 farmers. Farmers were enlightened with the importance of soil



microbes for maintaining the soil health, importance of essential minerals and nutrient for soil health by scientists of KVK. They emphasized more on the importance of soil in agricultural productivity and highlighted the need for regular testing of soils for optimum use of chemical fertilizers and better soil management practices in the district.

KVK, Targhadia

World Soil Day was celebrated by KVK, Targhadia at

Village Lilapur, Taluka: Jasdan, Dist: Rajkot in collaboration with Reliance Foundation, Jasdan. Different lectures like; importance of soil in



agriculture, role of soil health for crop production, method of collecting soil sample for analysis, importance of Soil Health Card (SHG), technologies for increasing and maintaining the soil fertility for long run, use of bio-fertilizers, organic matters, green manuring; crop residue recycling for soil fertility improvement and increase crop production. Also SHCs were distributed to farmers. Total 60 farmers participated in this event.

Celebration of Jay Kisan Jay Vigyan Day

KVK, Amreli

Jay Kisan Jay Vigyan Day was celebrated on the birth anniversary of former Prime Ministers Shri Atal Bihari Vajpayee and Late Shri Chaudhary Charan Singh at KVK Amreli.



The celebration was organized keeping in view their immense contribution for promoting the use of science for the welfare of farmers. Scientists of KVK provided latest technologies in agriculture and their benefits. Mr. Pravinkumar J. Vagadiya, a progressive farmer shared his experience in organic farming. Total 60 farmers participated in this event.

KVK, Khapat

"Kisan & Vigyan Divas" was also celebrated at KVK, Khapat on December 25, 2019. Healthy discussion was carried out among scientists and farmers at this event. Total 44 participants remained present in this programme.

KVK, Nana Kandhasar

Kisan Divas was celebrated by KVK, Nana Kandhasar on December 23, 2019 at Sarodi village of Surendranagar district. Senior Scientist & Head of KVK, elaborated the multi-dimensional role of farmers for maintaining sustainability and prosperity in agriculture. About 89 farmers participated in the programme. Kisan Vigyan Day was aslo celebrated on December 25, 2019. Scientist shared information regarding new agricultural technologies & their advantages. Total 57 school children of Surendranagar district participated in the programme.

KVK, Targhadia

Kisan Diwas was celebrated by KVK, Targhadia on December 23, 2019.



Technology Week Celebration

KVK, Jamnagar

Technology week was celebrated by KVK, JAU, Jamnagar during October 14-19, 2019. This programme

was chaired by Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU, Junagadh and Co-chaired by Dr. V. V. Rajani, Director of Extension Education, JAU,



Junagadh. During this week, farmers were guided about pink bollworm management, rotting of groundnut and cotton due to heavy rain. They encouraged for organic farming as well as reduction of cost of cultivation using improved technologies. Special emphasis was given on value addition of agricultural produce for more income generation. Many demonstration and video shows were arranged during this programme. Total 811 farmers / farm women from different blocks participated and also were provided with the extension literature.

KVK, Khapat

Technology week was also celebrated on Groundnut during October 7-11, 2019 by KVK Khapat with a view to provide an opportunity to boost up technology transfer through seminars and live demonstration. During the week, total 230 farmers participated in seminar and discussion.

Quinquennial Review Team (QRT) visit

SSK, Junagadh

Quinquennial Review Team (QRT) from ICAR-ATARI, Pune visited to JAU during December 18-22, 2019. QRT meeting of 15 KVKs held at Kisan Vikas Bhavan, Sardar Smruti Kendra, JAU, Junagadh on December 19, 2019 by Directorate of Extension Education, JAU, Junagadh. Dr. K. S. Khokhar, Ex-Vice Chancellor, CCSHAU, Hisar Chaired the meeting with other dignitaries' viz. Dr. A. K. Mehta, Ex-ADG, (Agril. Extension), ICAR; Dr. Sudhir Raizada, Ex-ADG, (Fisheries), ICAR; Dr. RPS Ratan, Ex-Director Extension, BAU, Ranchi; Dr. Indrajeet Mathur, Ex-Director Extension, MPUAT, Udaipur; Dr. Lakhan Singh, Director, ICAR-ATARI, Pune. Heads/ Representatives of 15 Krishi Vigyan Kendra delivered their QRT report for the year 2011-12 to 2018-19. Dr. V.V. Rajani DEE, JAU, Junagadh and Dr. V.T. Patel, DEE, SDAU, Sardarkrushinagar also participated in the QRT meeting. The QRT team also visited the KVK-Targhadiya, KVK-Jamnagar, KVK-Kodinar and KVK-porbandar during their visit.



KVK, Jamnagar

Quinquennial Review Team (QRT) also visited KVK, JAU, Jamnagar during Dec. 21-22, 2019 for review period of 2011-12 to 2018-19. They discussed with KVK staff members and farmers (50) from different categories about farming system of KVK jurisdiction. QRT team visited, KVK building, museum of KVK, information gallery in KVK building, home science laboratory, plant health laboratory, soil health laboratory, Gir cow unit, solar voltaic unit (submersible pump), drip irrigation unit, crop cafeteria, seed production plot with 100% drip irrigated farm, nursery unit, vermi compost unit, NADEP unit, compost pit unit, water harvesting structure, well/tube well recharge unit, horticulture unit, implements gallery, etc. At the end of visit, team appreciated the work done by KVK scientists. According to them this KVK is really like the "Temple for Farmers".

KVK, Targhadia

QRT visited KVK, Targhadia, Rajkot on December 18,

2019. They visited the different demonstration units and discussed with progressive farmers. The QRT members motivated the KVK staff and farmers through tree plantation at KVK campus, Targhadia.



Fertilizer Application Awareness Programme

KVK, Jamnagar

KVK, Jamnagar organized Fertilizer Application

Awareness programme on October 22, 2019 at Harsadpur Village. In this programme video clips were shown for awareness on efficient use of fertilizer, effect of micronutrient on plant



micronutrient on plant. Total 63 farm women participated in this programme.

KVK, Khapat

Fertilizer Awareness Programme was organized at Krishi Vigyan Kendra, Khapat on October 22, 2019. Scientists created awareness about judicious use of fertilizer, harmful effect of chemical fertilizer. Total 92 farmers & farm women participated in this programme.

KVK, Nana Kandhasar

Fertilizer Awareness Programme was organized at KVK, Nana Kandhasar on October 22, 2019. Lectures were organized on macro and micro plant nutrient & their role in plant growth and development, use of soil health cards & efficient use of fertilizers, sustainable agricultural practices under changing climate. Shri. R. R. Kanani, Deputy Marketing Manager (GNFC) thrown some light on new fertilizers introduced in the market and its application. More than 101 farmers participated from different villages of the Surendranagar district.

Pink Ball Worm Awareness Programme

To aware farmers about pink ball worm infestation, an awareness programme was organized at KVK, Khapat on December 21, 2019. Scientists delivered lectures on life cycle of pink ball worm and integrated approach to prevent its infestation. Total 29 farmers & farm women remained present in this programme.

Pride of the University

Gir Unit of C.B.F. Ranked with "A" Grade

AICRP on Indigenous Cattle (Gir) is functioning at Cattle Breeding Farm, JAU, Junagadh for Genetic improvement of Gir cattle through progeny testing by Central Institute for Research on Cattle (CIRC-ICAR),

Meerut (UP), since 2009. Gir unit of Cattle Breeding Farm, JAU, Junagadh was awarded with 'A' grade indicating 'Very Good' remark in research evaluation in Annual Review Meet of AICRP on Cattle for last three years.



Best M. Sc. (Agri.) Thesis Award

M. Sc. (Agri.) student Ms. Rupapara Mayuri Dipakbhai of

Department of Plant Pathology, College of Agriculture, JAU, Junagadh conducted PG research on "Cumin wilt (Fusarium oxysporum f. sp. cumini) and its



management" under the guidance of Dr. K. K. Kanzaria, Assistant Research Scientist. She was awarded by ASPEE Agro Equipment Pvt. Ltd. Award – 2019 for the best research work done by M. Sc. (Agri.) student in Plant Protection on November 8, 2019 at AAU, Anand during one day PPAG seminar.

Dr. A.P.J. Abdul Kalam National Award

Dr. R. P. Kalma, Scientist (Livestock Production &

Management), KVK, JAU, Nana Kandhasar was awarded with the Dr. A.P.J. Abdul Kalam National Award for his research on "Effect of probiotic supplementation in rabbit"



and also for the innovative technology transfer in agriculture and allied sciences, providing technological expertise to farmers. This award was given by International Institute for Social & Economic Reforms, Bengaluru. The award ceremony was held on November 27, 2019 at Bengaluru.

Best Exhibition Stall Award

Krishi Vigyan Kendra, JAU, Nana Kandhasar was awarded with the "Best Exhibition Stall Award" in category of agricultural research, development and extension. The award was presented by Dr. Mahendra Munjpara, Hon'ble Member of Parliament, Surendranagar during mega event "Destination Gujarat 2019". The exhibition was organized by Sansa Foundation. Delhi from December 18-20, 2019 at

Surendranagar, Gujarat to provide formal platform to farmers and rural youth to interact with eminent personalities of various sectors like; science & technology, health care,



agriculture, information technology, power & textile, women empowerment and education.

Best Oral Presentation Award

Dr. Urveshkumar D. Patel, Associate Professor, Department of Veterinary Pharmacology and Toxicology, College of Veterinary Science & A.H., JAU,

Junagadh received Best Oral Presentation Award in the technical session on "Toxicology of Xenobiotics" for the research paper presented in XIX Annual Conference



of ISVPT and National Symposium on "Pharmacogenomics in the development and validation of indigenous drugs" held at College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala during December 18-20, 2019. He also received Best Poster Presentation Award in the technical session on "Ethnopharmacology" for research paper presented. Dr. P. H. Tank, Principal & Dean and all the faculty of College of Veterinary Science & A.H. appreciated and congratulated for achievement.

JAU FAMILY WISHES HAPPY AND HEALTHY RETIRED LIFE

No.	Name and designation	
October 2019		
1.	Dr. M. K. Mandavia, Professor	
2.	Dr. S. V. Patel, Professor (P)	
3.	Shri M. A. Patel, Agril. Officer	
4.	Shri K. S. Murabiya, Head Clerk	
5.	Shri K. D. Makadiya, Mali	
December 2019		
6.	Shri F. S. Sodha, Livestock Inspector	
7.	Shri P. T. Chaudhary, Livestock Inspector	
8.	Shri M. S. Parmar, Livestock Inspector	
9.	Shri V. I. Kakrecha, Livestock Inspector	
10.	Ku. T. K. Patel, Livestock Inspector	
11.	Smt. Jenuben H. Theba, Lab. Boy	

11. Sinc. Schaoch 11. Theoa, Eas. Boy	
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То,	
From: Directorate of Extension Education	
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