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Education, JAU,  
Junagadh-362001Phone : (0285) ;  
2671669 ; 2672080-90  
PBX-341;URL: <http://jau.in/index.php/jau-news-letter>Email: [dee@jau.in](mailto:dee@jau.in);  
[newsletter@jau.in](mailto:newsletter@jau.in)**From Vice Chancellor's Desk****Commemorating the International Year of Millets (IYM)-2023**

Dear Colleagues,

Greetings from Junagadh Agricultural University!

With one month already into this new calendar year of 2023, I am hopeful that whatever objectives and goals we have set to achieve professionally and personally shall be fulfilled in the months to come with utmost zest and dedication. Friends, there is a saying: whatever good has gone away comes back to us with full force, the moment we realize its worth. With the upward shift in rice and wheat cultivation across India post-green revolution, the consumption of millets, especially Jowar, Bajra, and Ragi, slowly disappeared from our everyday cuisine.

The diversion in cropping patterns towards rice and wheat has definitely yielded us food self-sufficiency and, of course, the much-needed food sovereignty. Apart from helping the neighbouring nations with free food supplies, we were also able to keep off the negative implications of COVID-19 away thanks to our highly subsidized Public Distribution System (PDS) with foodgrains. Now the time has come for us to go beyond self-sufficiency in food and shift our focus on household nutrition, which has become the need of the hour. The rise in lifestyle disorders such as central obesity and diabetes also calls for some effective plant-based dietary solutions, especially millets that are gluten-free with a low glycemic index.

It is in this background that we need to celebrate our increased attention towards millets. The United Nations, upon GoI's proposal, has rightly declared 2023 as the International Year of Millets (IYM-2023) with the slogan, 'Rich in heritage, full of potential'. Being an excellent source of vitamins, minerals and antioxidants, the less water-intensive and low input requirement nature of millets make them an ideal choice for environment-friendly cultivation. Though the acreage of millets in India has come down from 37 Mha in the 1960s to 14 Mha in 2020-21, India still contributes at least 40 percent to the global millet output. In its mission to increase millet production by another 40 percent, the Government of India has identified 14 states, including Gujarat. Various state governments and institutions are also working on popularizing millet cultivation and developing improved varieties. The Pearl Millet Research Station, JAU, Jamnagar has taken several initiatives in pearl millet (bajra) cultivation. The world's second hybrid bajra, HB-2, was released by the centre in 1966 quickly followed by an early maturing bajra variety in 1968 (HB-3), which became immensely popular. So far, the research station has come up with 23 hybrids suitable for cultivation across the state and the country. Biofortified bajra hybrids (GHB 1129 and 1225) with higher iron and zinc content are also released by JAU over the years. In addition, Essentially Derived Variety developed using genomics-assisted breeding bajra hybrid (GHB 538: *Maru Sona*) having the resistance against mildew disease is developed recently in collaboration with ICRISAT, Hyderabad.

With the Government's impetus to National Nutrition Mission, POSHAN Abhiyaan, millets are slowly being absorbed into the country's flagship schemes, viz. PDS and mid-day meals. Millet cultivation can be encouraged among farmers with effective operationalization of minimum support prices and investments into processing and value addition of the harvested produce. Institutional efforts in increasing awareness among rural and urban populations alike, especially among school and college goers, can also reap dividends and help us remain a fit, healthy and happier nation.



(V. P. Chovatia)

## Evaluation drive of World Bank officials and ICAR for NAHEP-IDP

An evaluation drive was conducted by World Bank officials and ICAR, M & E, PIU, members under National Agricultural Higher Education Project (NAHEP)-IDP on November 17-18, 2022 at Junagadh Agricultural University. Mr. Robin Oddy, an official of the World Bank, Mr. Nilesh Deshmukh, and Mr. P. Saravanan, Consultant, NAHEP, PIU, ICAR evaluated various activities and facilities developed under IDP at JAU.

Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU, Dr. H. M. Gajipara, PI (NAHEP-IDP) and Director of Research; Dr. N. K. Gontia, Co-PI (NAHEP-IDP) and Principal and Dean, CAET; Dr. S. G. Savaliya, Co-PI (NAHEP-IDP) and Principal and Dean, CoA, Dr. P. M. Chauhan, Co-PI (NAHEP-IDP) and Prof. & Head, Dept. of REE; Dr. P. Mohnot, ADR and Nodal Officer (ICAR); Dr. K. C. Patel, Director (IT); Dr. R. M. Solanki, Director Students' Welfare, JAU were present during the evaluation drive.



The interaction session with young entrepreneurs, and students who attended various International and National training under the aegis of NAHEP-IDP was also held. Around 100 students and 25 faculty and other staff members remained present in the session. Evaluation team members interacted with 9 entrepreneurs and applauded them for their work in the new domain to uplift agriculture.



The evaluation team was very impressed by observing various students' projects on the application of AI, sensors, and machine learning in Agriculture. The evaluators conveyed that skill development programmes augment student skills

to become competitive, confident, positive-minded, analytical, and expressive. The evaluator appreciated the activities and achievements of JAU under NAHEP-IDP.

## Celebration of Days

### World Cotton Day

World cotton day is celebrated every year on October 7, 2022, across the globe through events that disseminate knowledge and give assistance to cotton farmers, processors, researchers, and all other stakeholders about cotton production and marketing. Cotton Research Station, Junagadh Agricultural University, Junagadh also celebrated world cotton day on the theme Weaving a better future for cotton. Dr. V. P. Chovatia, Hon'ble Vice Chancellor JAU, remained present as an Inaugurator and Chairman of this special occasion of the world cotton day celebration. Dr. H. M. Gajipara, Director of Research, JAU, Junagadh remained present as the Chief Guest, and Dr. K. B. Parmar, Associate Director of Research, JAU, Junagadh as the Special Guest of this function. Dr. M. G. Valu, Head of Cotton Research Station welcomed the dignitaries and representatives of various organizations *i.e.* Vardhaman Textile and Better Cotton Initiative (BCI), Reliance Foundation, AFPRO, and representatives of different companies and farmers. Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU addressed the gathering that India is one of the largest cotton producers globally. Cotton fiber and cottonseed are two of the most heavily used plant products globally. It is a multipurpose plant chiefly used in the textile industry but also in the medical sector, edible oil industry, animal feeds, and bookbinding, among others. It plays a dominant role in the industrial and agricultural economy of the country. Dr. H. M. Gajipara, Director of Research, JAU urged cotton growers to adopt climate-resilient cotton cultivation technologies for sustainable and profitable cotton cultivation.



The rally was organized and flagged off by Hon'ble Vice Chancellor, Dr. V. P. Chovatia. Slogans of cotton production technology were chanted and presented on the flag chart of World Cotton Day.



YouTube live programme was also organized on "Measures to increase quality production in cotton". Voice messages of cotton advisory and programme links were sent to various farmers' groups (approx. 5000) with the help of Reliance Foundation, BCI, AFPRO, and ATMA, Junagadh.

### International Year of Millets-2023

Under the creation of awareness among the students for the celebration of "International Year of Millets-2023", Pearl Millet Research Station, JAU, Jamnagar organized a one-day training programme on "Varietal Characterization and Seed Production Technology in Pearl Millet" under the STR component of AICRP on Seed (Crops) on October 15, 2022. Nineteen students of the RAWE programme of the seventh semester, B. Sc. (Agri.), College of Agriculture, JAU, Junagadh participated in the training. The scientists of the centre explained various aspects of varietal characterization and seed production of pearl millet.



The same training programme was also organized on December 23, 2022, for twenty-eight students (Girls) of the RAWE programme of the seventh semester, B. Sc. (Agri.), College of Agriculture, JAU, Mota Bhandariya (Dist.: Amreli). The topics like; varietal development, quality seed production, seed availability, area expansion, and value chain for creating demand for pearl millet were covered in the training.

### Agricultural Education Day

Agricultural Education Day-2022 was celebrated by AICRP on Irrigation Water Management (ICAR), Department of Irrigation & Drainage Engineering, CAET, JAU, Junagadh on December 3, 2022. This event was organized under the guidance of Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU, Junagadh. Dr. N. K. Gontia, Principal & Dean of the college remained present as president of the function. More than 100 participants including students and faculty members attended the event.

### World Soil Day

Department of Soil Science and Agriculture Chemistry, CoA, JAU, Junagadh celebrated World Soil Day on December 5, 2022. Hon'ble Vice-Chancellor, Dr. V. P. Chovatia remained present on the occasion and made the presidential address on theme "Soils: where food begins". An introductory speech on the current scenario, soil-related problems, and management was delivered by Dr. S. G. Savaliya, Principal and Dean, of CoA. A guest lecture was also delivered by Dr. K. P. Patel, Retired Principal and Dean, AAU, Anand. The faculty as well as PG students of Soil Science, Agronomy, Horticulture, and Biochemistry disciplines participated in the poster exhibition competition.



The All India Coordinated Research Project (AICRP) on Irrigation Water Management (ICAR), Dept. of Irrigation & Drainage Engineering, CAET, JAU, Junagadh also celebrated "World Soil Day – 2022". The function was presided over by Dr. N. K. Gontia, Principal & Dean of the college. Total 91 students and 15 faculties, 5 technical / supporting staff participated in the said event.



KVKs of JAU also celebrated World Soil Day by organizing different lectures; the importance of soil health and soil health card, improvement of soil fertility and soil health by maintaining soil carbon status, etc.

### Demonstrations of Pesticide Spraying Drone

The use of drone technology in agriculture has great potential to transform Indian agriculture by reducing input cost, labor cost, and sustainable production. With the initiation of Hon'ble Vice Chancellor, Dr. V. P. Chovatia, a number of field demonstrations were organized at different farms of JAU by the Department of Farm Machinery and Power Engineering, College of Agril. Engg. & Technology, JAU, Junagadh.

The pesticide spraying demonstration was organized at Agricultural Research Station (Fruit Crops), JAU, Mahuva, on December 9, 2022, for one-hectare coconut plantations. Around 30 participants including scientists and students remained present during the demonstration.



Field demonstration of spraying pesticides using drone was also carried out on field crop of Pigeon pea from December 15 to 19, 2022, and covered more than 9 hectare area of the Department of Seed Science and Technology, JAU, Junagadh. Dr. N. K. Gontia, Co-PI (NAHEP-IDP) and Principal & Dean, CAET along with faculty and staff member remained present.

### Training on "Varietal Characterization and Seed Production Technology in Castor"

One day training programme on "Varietal Characterization and Seed Production Technology in Castor" was organized under the STR component of AICRP on Seed (Crops) at Pearl Millet Research Station, JAU, Jamnagar on December 9, 2022.



Total twenty-five students of B. Sc. (Agri.), College of Agriculture, JAU, Mota Bhandariya participated in the training. The training was organized to create awareness of different aspects of castor hybrid and their parent seed production technology.

### Training on the Use of Solar Energy in Agriculture

One day farmers training programme on "Use of Solar Energy in Agriculture" was organized by AICRP on Plastic Engineering and Agricultural structure and Environment Management (PEASEM), Dept. of REE, CAET, JAU, Junagadh on November 5, 2022. The programme was inaugurated by Dr. V. P. Chovatia, Hon'ble Vice Chancellor, JAU, Junagadh. Dr. N. K. Gontia, Principal and Dean, CAET, JAU, Junagadh; Dr. P. M. Chauhan, Prof. & Head, Dept. of REE, CAET, JAU, Junagadh, Dr. H. C. Chhadvadia, Assoc. Ext. Edu, DEE, JAU, Junagadh, and Dr. G. V. Prajapati, Research Engineer, AICRP on PEASEM remained present and graced the function. The lectures were delivered by the experts of the department during the training programme. Farmers visited the PEASEM lab and solar energy lab of the Renewable Energy Engineering department of the college. They also visited experimental sites of solar tunnel dryer and Agri-voltaic technology. The demonstration of the patented "Foldable Container for Storage and Transportation of Agricultural Produce" was carried out during the training programme. A total of 65 progressive farmers benefited from the training programme.



### Bi-monthly Workshop

The bi-monthly workshop under T & V system was organized by the Directorate of Extension Education, JAU, Junagadh on December 12-13, 2022. The main objective of the workshop was to transfer new technologies/innovations developed by JAU to the extension personnel.

Dr. H. M. Gajipara, DEE, JAU, Junagadh inaugurated the workshop and advised all participants/officers to extend the latest innovation at ground level. Shri S. K. Joshi, Joint Director of Agriculture, Rajkot & Junagadh

presented the farmers' activities done by the Dept. of Agriculture. The agriculture scientists/ experts delivered talks on various aspects of recent developments in Agriculture. A total of 31 officers participated in the event.



### Certificate Course on Insecticide Management

A 12 day Certificate Course on Insecticide Management was offered by JAU as per the guidelines of the National Institute of Plant Health Management (NIPHM), Hyderabad. The course was made compulsory by GoI for existing dealers/distributors of Insecticide to equip them with professional competency on pesticides & pest management and advisory services thereof. Under the guidance of Hon'ble Vice Chancellor, Dr. V. P. Chovatia, JAU started the programme on February 01, 2021, at different KVKs of JAU viz Amreli, Nana Kandhasar, Targhadia, Jamnagar, Porbandar, Pipalia and Morbi, JAU Research stations at Dhari & Mahuva as well as KVKs of NGOs at Kodinar and Lokbharti Sanosara. During the last two years, JAU achieved success with completing the course for 5419 dealers in 140 batches up to December 2022. Dr. H. M. Gajipara, Directorate of Extension Education, Course Director and Dr. G. R. Gohil, Course Co-ordinator, Mr. Arvind Timbadiya, Secretary, All India Input Dealers Association, Heads of KVKs and JAU scientists played a key role to achieve the success. On December 29, 2022 all the Senior Scientists and Heads of KVKs, facilitators, as well as 141 input dealers of the last batch were felicitated with certificates by Hon'ble Vice Chancellor, JAU, Junagadh.



### Farmers Training Programme

Directorate of Extension Education, JAU, Junagadh organized a farmers training programme at Sardar Smruti Kendra, Junagadh for farmers of Kalawad Taluka of Jamnagar and Gondal Taluka of Rajkot district on December 17, 2022. The training programme was inaugurated by Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh. A total of 69 farmers participated in the training.



### Agri-Stratup Conclave & Kisan Sammelan

The Ministry of Agriculture & Farmers' Welfare, GoI organized an Agri-Stratup Conclave & Kisan Sammelan at ICAR-IARI, New Delhi. Shri Narendra Modi, Hon'ble Prime Minister inaugurated the Conclave & Kisan Sammelan on October 17-18, 2022. In this function, about 120 students of CAET, JAU, Junagadh joined virtually by webcasting and got information on various Govt. programme related to farmers' welfare. Dr. N. K. Gontia, Principal and Dean, Dr. T. D. Mehta, Convener (SSIP Cell) & Assoc. Prof. (FMPE), the faculties of CAET also remained present and encouraged the students to Agri-Stratup ideas.



### Inter-State Agricultural University Sports Tournament

Inter-State Agricultural Universities' Sports Tournament of Volleyball, Basketball, Table Tennis, and Badminton (Boys) was organized at JAU, Junagadh on November 27, 2022.



State Agricultural Universities *i.e.* JAU, Junagadh, AAU, Anand, NAU, Navsari, and SDAU, Dantiwada participated in this tournament. JAU, Junagadh bagged Championships in Volleyball and Table Tennis.

Inter-State Agricultural Universities (SAUs) Volleyball, Table Tennis, and Badminton (Girls), Kho-Kho, and Kabaddi (Boys) were organized at AAU, Anand on December 13, 2022. JAU, Junagadh won Championships in Volleyball, Table Tennis (Girls), and Kho-Kho (Boys) as well as Runners Up in Kabaddi (Boys).



### Lecture on “Drug and Youth”

The Directorate of Students' Welfare, JAU organized a lecture on “Drug and Youth” by Jaykishan Devani, Advocate, Junagadh under NAHEP-IDP on November 12, 2022. The students were made aware of the harmful effects of drugs on the human body, and the efforts of the Narcotics department to save youth from drug addiction. The laws related to drugs were also discussed with the students. Around 200 students benefitted from this lecture.



### Training on “The Science & Art Behind Meditation”

Four days training programme on "The Science & Art Behind Meditation" was organized by the Directorate of Students' Welfare, JAU from November 24 to 27, 2022 under NAHEP-IDP at JAU, Junagadh. Dr. Jignesh Shelat from Sarvangi Life Solutions LLP, Ahmedabad, and Prof. Virendra M. Bhatt, retired professor, H. L. College of Commerce, Ahmedabad were the resource persons of the training. This training programme covered the topics, *viz.*, detox & rejuvenate your mind, relax your body & mind, the purpose of prayer, the best time to meditate in a day, specific posture during meditation, meditation during sickness, traveling, diet and lifestyle during meditation, balancing material & spiritual aspects of life, removal or detox of anger, restore

positivity, breathing exercise, self-study, practicing heartfulness, *etc.* More than 400 students, as well as staff, were involved and benefitted through this programme.



### Expert lectures delivered

The scientists of Cotton Research Station, JAU, Junagadh attended the Farmers' Shibirs organized by AFPRO (NGOs) on December 26-27, 2022 in villages of Rajkot district. Prof. M. V. Variya, Dr. A. M. Polara, and Prof. D. K. Davara delivered lectures on integrated pest/diseases/nutrient management in cotton and guided more than 300 farmers.

Dr. G. V. Prajapati, Research Engineer, AICRP on PEASEM attended Farmers Shibir organized by AFPRO at Parab Vavdi on Nov 21, 2022. He delivered a lecture on “Water Management in Cotton crop”. Dr. S. P. Cholera, Post Harvest Engineer also delivered a lecture on "Value addition of various horticultural crops". He demonstrated the patented “Foldable Container for Storage and Transportation of Agricultural Produce” during the training programme. Around 100 farmers and farm women remained present.



Dr. S.V. Undhad, Scientist, Plant Protection, KVK, Pipalia delivered a lecture on the "Importance of Biofertilizer in field crops" at one day farmers' seminar at Devchadi village of Gondal Taluka on October 15, 2022. Around 900 farmers participated in the seminar.



## KVK Activities

### Skill Development Training Programme

Krishi Vigyan Kendra, JAU, Pipalia, in collaboration with ICAR-NAARM, Hyderabad organized five days Skill development training programme on “Eco-Friendly Bags making for Economic Empowerment of Rural Women” at Dhoraji from October 3 to 7, 2022. A total of 50 SC rural women from 10 self-help groups actively participated and benefitted. The input materials for bag making such as sewing machines, sewing accessories, different clothes, etc. were also distributed to the participants. The programme was funded by ICAR-NAARM, Hyderabad under Schedule Caste Sub-Plan (SCSP) and coordinated by Dr. M. Balakrishnan, Principal Scientist & Chairman SCSP, ICAR-NAARM, Hyderabad, and Dr. Mamta Kumari, Scientist, KVK, Pipalia.



### Swachhata Hi Sewa Programme

KVKs of JAU organized the Swachhata Hi Sewa Programme from October 2 to 15, 2022 by focusing on managing the legacy waste at garbage vulnerable sites in the villages. Different activities like; swachhata rally, taking a pledge, cleanliness drive, adoption of villages for microbial-based agricultural waste management using vermicompost, crop residue management, demonstration of technologies on waste and wealth, the orientation of school children on various topics like; hygiene, sanitation and cleanliness were organized.

### Celebration of Mahila Kisan Diwas

The Mahila Kisan Diwas or ‘International Rural Women Day’ was organized by KVKs of JAU on October 15, 2022, to empower women in the field of agriculture.

Krishi Vigyan Kendra, Pipalia organized the programme on the theme “Millets Empowering Women and Providing Nutritional Security”.

KVK, Targhadia, and KVK, Amreli organized lectures on the kitchen garden, women and child health and nutrition, women empowerment, value addition of different fruit crops, etc.



KVK, Jamnagar, and State Horticulture Department jointly organized a training programme on fruit and vegetable preservation.



### PM Kisan Samman Sammelan

A live webcast of PM Kisan Samman Sammelan was organized on October 17, 2022, by GoI on the occasion of the release of the 12<sup>th</sup> installment of PM-Kisan. The farmers in large numbers attended the live broadcast of the programme at KVKs of JAU. Dr. H. M. Gajipara, DEE, JAU also joined the programme from KVK, Nana Kandhasar.

A demonstration of various implements was also organized at KVK, Khapat during this event.



### Celebration of Kisan Divas

The Kisan Divas also known as National Farmers Day, was celebrated on December 23, 2022. The idea behind celebrating the day is to express our gratitude to farmers who are the backbone of the country's economy. On this occasion, KVK Pipalia in collaboration with the office of Deputy Director, Horticulture, Rajkot organized a farmers' seminar at Dhoraji. Around 180 farmers & farm women participated and shared their experiences. KVK Targhadia (Rajkot-I) also organized the programme. A total of 103 farmers remained present.

KVK, Nana Kandhasar organized "Kisan Diwas 2022" at the KVK campus & Kherali village of Surendranagar district. The KVK scientists explained the concept of Natural Farming to the farmers. A total of 133 farmers participated and got benefitted during the programme.



KVK, Jamnagar, and the Deputy Director of Horticulture jointly celebrated the Kishan Divas by organizing demonstrations and training to create awareness on Natural Farming, value addition, packaging, and market intelligence as well as reduction of input cost and increase net income in agriculture, etc. A total of 160 farmers from Dhrol Taluka participated in the programme.

#### Animal Treatment Camp

KVK, Targhadia in collaboration with Animal Husbandry Department organized Animal Treatment Camp for infertility problems in cows & buffalos at Hodathali village of Rajkot district on December 31, 2022. KVK Scientist Dr. M. M. Tajpara (Animal Science) treated 113 dairy animals for infertility problem like anoestrus, and repeat breeding cases.

#### Awards and Accolades

##### Young KVK Scientist Award

Dr. R. P. Kalma, Scientist, KVK, Nana Kandhasar JAU, received the "Young KVK Scientist Award" for innovative technology transfer in agriculture and allied sciences. The award was given during the 7<sup>th</sup> International Conference on Opportunities and Challenges in Agriculture, Environmental & Biosciences for Global Development organized during October 29-31, 2022 at Goa.



#### Sad Demise of Faculties/Staff During Service

Sr. No.	Name and Designation	
<b>October - 2022</b>		
1	Prof. J. C. Dhingani	Asst. Prof.
2	Shri S. D. Pokiya	Sr. Clerk
<b>November- 2022</b>		
3	Shri G. M. Megal	Agri. Sup.

#### Superannuated Faculties/Staff

JAU *Pariwar* Wishes All a Happy and Healthy Retired Life Ahead

Sr. No.	Name and Designation	
<b>October - 2022</b>		
1	Shri K.H.Ganavani	Sr. Clerk
2	Shri S.L.Bhut	Civil Over Sear
<b>November- 2022</b>		
1	Prof. D. V. Bhoot	Asst. Prof.
2	Mr. S. R. Thakar	Asst. Prof.
3	Mr. M. B. Kapopara	Asst. Pro.
4	Shri V.D.Mandavia	Lab Boy
<b>December- 2022</b>		
1	Shri C. D. Makawana	Agri. Asst.
2	Shri S.C. Patel	Agri. Sup.
3	Shri K.J. Thumar	Agri. Asst.
4	Shri R.N.Bhalani	Peon
5	Manguben B. Makawana	Agri. Laborer
6	Savitaben B. Khut	Agri. Laborer

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From

Directorate of Extension Education  
Junagadh Agricultural University  
JUNAGADH 362 001 (Gujarat)