Annual Report
2021-22

Sri Karan Narendra Agriculture University
Jobner (Raj.)

ANNUAL REPORT
SKNAU

2021 – 22

Sri Karan Narendra Agriculture University, Jobner – 303329
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July, 2022

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FOREWORD

It is my great pleasure to write the foreword for the Annual Report of Sri Karan Narendra Agriculture University, Jobner for the academic year 2021-22. As Vice Chancellor, I have had the privilege of leading and serving this esteemed institution, and I am proud to present to you a comprehensive overview of our achievements and progress over the year. This report is a testament to the hard work, dedication, and unwavering commitment of our faculty, staff, students, and partners.

The year 2021-22 had been a challenging one for higher education institutions globally, but despite the many difficulties posed by the pandemic, our university has remained steadfast in its commitment to providing an excellent education to our students and contributing to the betterment of society through innovative research and outreach initiatives. In the year 2021-22, our university continued to grow and thrive, offering a diverse range of programs and services that promote academic excellence and prepare our students for successful careers and meaningful lives. From cutting-edge research and innovative teaching practices to community engagement and student support, we are proud of the many ways in which our university is making a positive impact among its stakeholders.

In this report, you will find a wealth of information about our university, including our academic programs and initiatives, research outputs, student success, and community outreach efforts. You will also learn about the achievements of our faculty and staff, who are at the forefront of shaping the future of higher education.

I hope that this report will provide you with a deeper understanding of our university and inspire you to join us in our mission to educate and empower the next generation of leaders. I would like to extend my sincere thanks to all members of the university community who have contributed to our success over the past year. Our collective efforts have enabled us to achieve so much, and I am confident that, together, we will continue to build on this momentum in the years to come. I would like to express my sincere gratitude to all those who have contributed to this report and to the success of our university.

(Balraj Singh)
Sincerely

CONTENTS

EXECUTIVE SUMMARY

The Annual Report of the year 2021-22 portrays the wide spectrum of various academic and co-curricular activities at the University and its affiliated colleges. This report provides highlights about the academic management, student's centric activities and events, research projects and publications, footfall in international seminars and workshops, special achievements including awards and honours etc. The notable contributions made by the faculty members and some of the achievements of the students are also included. The Annual Report also provides highlights of the activities in the affiliated Institutions. The University has thirteen constituent colleges, seven research stations encompassing three agro-climatic zones and 11 KVK's within a territorial jurisdiction of 8 districts of Rajasthan to conduct the mandated education, research and extension in the area of agriculture and allied sciences. Presently, there are three faculties' viz., faculty of Agriculture, Dairy Science & Technology and Agri-Business Management at the University.

In financial year 2021-22, a total of Rs 13228.85 lakhs was provided to strengthen the academic activities, research and extension programmes in the University and funds received mainly from state government, ICAR, university resources and others. The internal revenue generated by the university is Rs. 1292.53 lakhs, which is 14.38% of total budget.

In order to create a dynamic academic environment, a number of decisions were taken like engaging Ph. D. students as Teaching Assistant for teaching UG/PG classes, part time jobs to the needy and willing UG students, adoption of BSMA approved courses for M.Sc. and Ph.D. programme in the University, provision to engage one Co-advisor/Co-supervisor from other organization, renovation of laboratories, sports facilities, smart class-rooms, internet connectivity, hostel renovation, CeRA facilities and construction of new hostels.

A total number of students enrolled in B.Sc. (Ag), M.Sc. (Ag) and Ph.D. programmes were 2206, 160 and 67, respectively. In undergraduate programme 58.66 per cent of total enrolled students were receiving fellowships, mostly from Govt of Rajasthan. Out of 160 students enrolled during 2021-22 in M.Sc. (Ag.), 105 (65.63%) were getting fellowships. In case of Ph.D., 51 (76.12%) out of 67 students received fellowship. One Ph.D. student in the Department of Horticulture, SKNCOA, Jobner received International Fellowship from Bioversity International via di San Domenico, Rome, Italy Alliance between Bioversity and International Centre for Tropical Agriculture (CIAT), Rome under the project of Fruitful lands India: Harnessing fruit tree biodiversity as a Nature based solution for food, security, nutrition, human and planetary health. The University's fourth convocation was organized on 21st January, 2022. In total 790 undergraduate, 81 post-graduate and 22 Ph.D. students were awarded degrees and various medals given to meritorious students. Dr. T. Mohapatra, DG, ICAR and Secretary, DARE, New Delhi was conferred with D.Sc. degree (honoriscausa) in fourth convocation for his remarkable and outstanding contribution as a researcher, administrator and policy expert. In reporting year, 11 students got scholarship from ICAR-JRF, 10 students got scholarship from ICAR-AIEEA scholarship, five student got scholarship from private organization and one got International fellowship on bioversity. This year,

total 22 students of the University qualified in different national level exams like SRF/JRF/NET and national fellowships. A total of 189 students were placed in different organizations. A model Career Development Centre (CDC) was also started in the University, with the support of ICAR-NAARM, Hyderabad to help the students in personality development, exposure, interaction with renowned personality and better job placements. Sixteen workshops/webinars were organized to enhance the skill and personality development of students. Besides classroom teaching, emphasis was given on hands on training of students and experiential learning through REDDY, ELP and in-plant training programmes.

In the year 2021-22, one Hybrid RHB-228 of pearl millet was notified for cultivation in state of Rajasthan. Two varieties i.e fenugreek RMt-354 and fennel RF-290 were approved for gazette notification and release at national level through central sub-committee of crop standards, notification and release of varieties of horticulture crops. One fennel variety RF-289 (Karan Sonf 1), groundnut variety RG 638, cluster bean RGr 18-1 (Karan Guar 14) were identified at National level. RTM-1624 (Krishna Tara) variety of Taramira was identified, notified and release in the year 2021-22 for all the taramira growing area of India. One variety CSJK174 (Karan Kabuli 4) released and notified CVRC in its 87th meeting held on 18th October, 2021 vide Notification No. S.O. No. 8 (E), dated 24th December, 2021. In total, 54 improved production technologies were developed and submitted for inclusion in the state Package of Practices. A total of 29 projects at present running at various units of SKNAU, Jobner funded by state government under the scheme RKVY. Beside these projects 17 ad-hoc research projects have also been running at different units. In 2020-21, four new projects were sanctioned from Govt. of Rajasthan under RKVY, DBT, IFFCO and others.Total cost of these projects amounted to 708.85 lacs. The University produced 6663.14 quintal of seed of various crops during the year, which includes 2757.26 qt. breeder seed and 3905.88 qt. truthfully labeled seed. Further, 32 projects on private testing were conducted by various scientists at different stations generated a revenue of Rs. 95.11 lakh for University.

The Krishi Vigyan Kendras conducted 350 Front Line Demonstrations on livestock and FLD/CFLD on oilseed, pulses, cereals, vegetables and spices in 985.44 ha. area at 2308 farmers field. The DEE and KVK's have imparted training to 9683 farmers, farm women, rural youth and extension functionaries through conduction of 214 on-campus and 203 off-campus trainings.The KVK's conducted 230 on farm testing trials on oilseed, pulses, cereals, vegetables and spices and 182 on livestock and also organized 45 field days on oilseeds, pulses, spices and livestock, in which 1886 farmers participated actively. Three days "Agri Expo-2022" was organized by Directorate of Extension Education from 28-30 March, 2022 at Sri Karan Narendra Agriculture University, Jobner. The theme of the expo was "Stepping towards Smart Agriculture" and inaugurated by the Chief Guest Shri Ashok Gehlot, Hon'ble Chief Minister, GoR. Hon'ble Chief Minister of Rajasthan. Sh. Ashok Gehlot inaugurated the Skill Development Centre, Advance Research Lab for Organic Farming, Academic block of SKN College of Agri-Business Management at Jobner, Staff quarters, Dean Residence and Water harvesting structures at CoA, Lalsot, Girls hostel and Dean Residence at COA, Fatehpur, Dean Residence and Girls hostel at COA, Kumher, Training hall, Farmer's hostel at ARS, Navgaon and Training hall and Machinery bank at KVK, Navgaon virtually during the inaugural session. Total 120

companies/institutions/NGOs/entrepreneurs etc. displayed their exhibitions in this expo and total 9500 farmers and 1500 students participated in this event. The Directorate of Extension Education, SKNAU, Jobner launched mobile apps and more than 3000 farmers downloaded the mobile app of KVKs, apart from this KVKs of SKNAU issued more than 400 advisories through mobile app, different social media group and ICAR developed platform. One year Diploma course for Input Dealers titled "Diploma in Agricultural Extension Services for Input Dealers (DAESI)" was organized at KVKs of SKNAU, Jobner. Total 4 courses were organized during July, 2021 to June, 2022, in which 159 input dealers from Bharatpur, Alwar, Jaipur, and Sikar districts participated. A number of new initiatives were taken particularly making Krishi literature like University Diary, Calendar, News & Views and Jobner Krishi available in public domain.

Sri Karan Narendra College of Agriculture, Jobner touched its 75-year milestone in the year 2021-22. In this regard, 76th Foundation day of SKN College of Agriculture, Jobner was organized on 07.07.2021 in Extension Theater, SKNCOA, Jobner. In this direction, many felicitation programme for Ex-Deans, Retired Teachers and Non-Teaching Faculty of SKNCOA, Jobner was organized. To encourage the Karonda growers of Rajasthan, SKN Agriculture University, Jobner celebrated the Karonda day on 30 August 2021 at RARI, Durgapura, Jaipur. To propagate awareness among farmers about the importance of medicinal and aromatic plants and embark ahead towards the Government's mission of Swasthya Rajasthan-Harit Rajasthan, Ghar-Ghar Aushdhi Yojana was organized at SKN Agriculture University, Jobner on 17 August, 2022. The University developed Integrated Farming System module in this University Park. SKNAU registered in Digi-locker portal and 891 degree certificates of UG, PG and Ph.D. for the session 2021 were uploaded on Digi-locker portal. ICAR-IASRI envisioned establishing Agri-DIKSHA and Virtual Classrooms in Agricultural Universities (AU) and as a part Virtual Classrooms were established in our university.

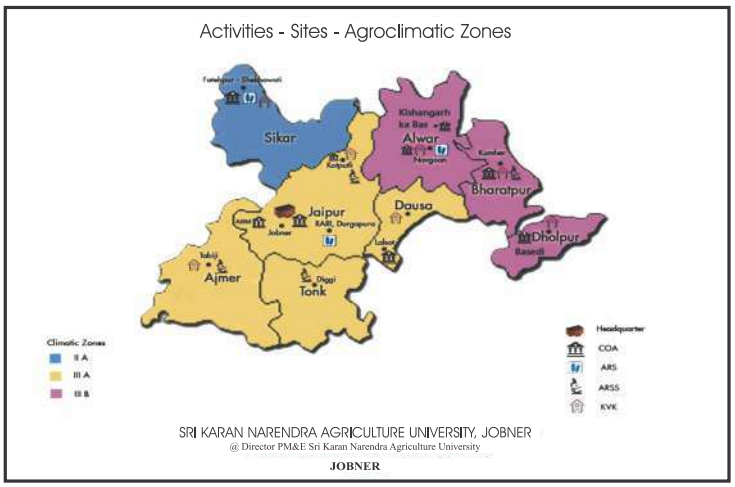
A Gautam Transit Hostel of 25 bed capacity and Bio agents Production Unit at SKNCOA, Jobner, Weed Museum and Mushroom unit, RARI,Durgapura, Jaipur were established and solar power of plants of total capacity 375 kW were installed at the campus of SKNCOA, Jobner and College of Agriculture, Lalsot. Landscape Cell of SKNAU, Jobner, planted total 27691 plants in SKNAU campus and its adopted villages. About 11641 plants were planted in the adopted village of the University as well as KVKs in the reporting year.

In order to improve the quality of research for students and to collaborate in academic and extension area, the SKNAU, Jobner inked MoUs with different institutions. In 2021-22, a total of 356 research articles were published in scientific journals, besides 18 books, 48 book chapters, 07 technical bulletin, 06 practical manuals and 211 technical articles were published by university faculty members and students.

One Orientation Programme for newly recruited Assistant Professors and SMS of SKNAU and two 21 days winter schools was organized by university. In addition to this, one international conference of four days was also organisedat SKN Agriculture University, Jobner in Hybrid Mode. IDP-NAHEP conducted eleven one-week offline entrepreneurship short courses on diverse themes for undergraduate students and around 304 students participated.

1. INTRODUCTION

Sri Karan Narendra Agriculture University (SKNAU), Jobner was established on 13th September 2013 by Govt. of Rajasthan under Agriculture University Jobner Act, 2013 (Bill No. 35). The University headquarter is situated at Jobner. The territorial jurisdiction and responsibility of this University extends to three agro-climatic zones of the state spanning a total geographical area of 64 lakhs ha accounting 1/6 land of the total geographical area of the state, thus covering eight districts of Rajasthan i.e. Sikar (Zone II A), Jaipur, Ajmer, Dausa, Tonk (Zone III A), Alwar, Bharatpur and Dholpur (Zone III B). The average rainfall of these districts is 500-700 mm.



The organizational setup of the University includes, Deans of Agriculture and Allied Sciences, Directorate of Research, Directorate of Extension Education, Directorate of Prioritization, Monitoring & Evaluation, Directorate of Human Resource Development, Directorate of Students Welfare, Directorate of Education and Controller of Examination. The Registrar for administrative matters and The Comptroller for financial matters, posted by the State Govt. are also integral components of the University organization.

The University imparts quality education for the development of well-trained and specialized human resources in agriculture & allied sectors. It has 13 constituent colleges, out of which SKN College of Agriculture, SKN College of Agribusiness Management and College of Dairy science and Technology are located in the University campus at Jobner. SKN College of Agriculture, Jobner is the main teaching campus, which offers four years B.Sc. (Hons.) Ag. with intake of 131 students; two years M.Sc. (Ag.) in 11 disciplines with intake of 84 students and Ph.D. in 8 disciplines with intake of 21 students. The other agriculture colleges are situated at Lalsot (Dausa, 2007), Kumher (Bharatpur 2013), Fatehpur-Shekhwati (Sikar, 2013), Navgaon (Alwar, 2018), Gonera-Kotputli (Jaipur 2019), Baseri (Dholpur, 2019) and Kishangarhbas (Alwar, 2020), Bhusawar-weir (Bharatpur, 2021), Jhilai, Niwai (Tonk, 2021) and Peetampuri, Neem Ka Thana (Sikar, 2021). The intake capacity of students in these colleges is 60. The total registered students in academic session 2021-22 were 2433. Rajasthan Agriculture Research Institute, Durgapura (Jaipur), which is the major research centre of the University contributes in M.Sc. and Ph.D. research. Two govt. and nine private colleges are also affiliated with the University. The admission to various agriculture and allied degree programmes occurs through (JET)/Pre-PG/Ph.D state level examination organized by one of the State Agriculture Universities on rotation basis.

Chancellor

Vice Chancellor

Dean

1. SKN College of Agriculture, Jobner
2. College of Agriculture, Lalsot (Dausa)
3. College of Agriculture, Kumher (Bharatpur)
4. College of Agriculture, Fatehpur-Sekhawati (Sikar)
5. College of Agriculture, Navgaon (Alwar)
6. College of Agri-Business Management, Jobner
7. College of Agriculture, Gonera- Kotputli (Jaipur)
8. College of Agriculture, Basedi (Dholpur)
9. College of Agriculture, Kishangarh-Bas (Alwar)
10. College of Dairy Science & Technology, Jobner
11. College of Agriculture, Bhusawar-weir (Bhartpur)
12. College of Agriculture, Jhilai, Niwai (Tonk)
13. College of Agriculture, Peethampuri, Neem Ka Thana (Sikar)

Director

Research | Education | Human Resource & Development | Students Welfare | Prioritization & Evaluation | Monitoring | Extension

1. Rajasthan Agriculture Research Institute, Durgapura (Jaipur)
2. Agricultural Research Station, Fatehpur-Sekhawati (Sikar)
3. Agricultural Research Station, Navgaon (Alwar)

Agriculture Research Sub Station

1. Diggi (Tonk)
2. Kotputli (Jaipur)
3. Tabiji (Ajmer)
4. Kumher (Bharatpur)

Officer

1. Registrar
2. Comptroller
3. Estate Officer
4. Controller of Examination
5. Librarian

1. Krishi Vigyan Kendra, Tabiji (Ajmer)
2. Krishi Vigyan Kendra, Dausa
3. Krishi Vigyan Kendra, Kotputli (Jaipur)
4. Krishi Vigyan Kendra, Fatehpur (Sikar)
5. Krishi Vigyan Kendra, Navgaon (Alwar)
6. Krishi Vigyan Kendra, Kumher (Bharatpur)
7. Krishi Vigyan Kendra, Dholpur
8. Krishi Vigyan Kendra, Arania, Sikar

The Directorate of Research was established in November 2013. There are seven research stations encompassing three agro-climatic zones under the administrative control of Directorate of Research, SKNAU, Jobner. These include Rajasthan Agricultural Research Institute (RARI) at Durgapura, Jaipur, two Agricultural Research Stations located at Navgaon (Alwar) and Fatehpur-Shekhawati (Sikar) and four Agricultural Research Sub-Stations at Tabiji (Ajmer), Kumher (Bharatpur), Gonera - Kotputli (Jaipur) and Diggi (Tonk). Rajasthan Agricultural Research Institute,Durgapura is the main Agriculture research station of the University.

There are 17 short and long term AICRP and AINP projects operating through Directorate of Research. The research grant mainly comes from ICAR & matching grant from the state govt. in proportion of 75:25. Out of these 17 projects, twelve are operating at Rajasthan Agricultural Research Institute, four at SKN College of Agriculture, Jobner and one at ARS Fatehpur-Shekhawati. The research is being conducted on most of the crops, fruits, vegetables and other crops suitable for this region. Apart from this, 9 RKVY, 18 adhoc and 31 testing projects from private companies were in operation under the University during the reporting year. Total 879.43 ha land is available in different units of the University to conduct research and for seed production.

The Directorate of Extension promotes agricultural development through transfer of agro-techniques by imparting training, advisories and farm information to extension personnel, line departments, farmers and other stakes holders through eight KVKs located at Tabiji (Ajmer), Dausa, Gonera-(Kotputli), Navgaon (Alwar), Kumher (Bharatpur), Dholpur, Fatehpur (Sikar) and Arnia (Sikar). All the KVKs are engaged in on and off campus training programmes being conducted on farm testing research, assessment and refinement of agricultural technologies, conducting front line demonstrations to demonstrate the production potential of latest crop varieties. Farm advisory/ information services are also provided by the KVKs through various literature, farmers' fair, field days, TV and Radio broadcast and other such activities. The main funding agency for Directorate of Extension Education is ICAR. However, some fund is also received from the State Govt. One monthly magazine Jobner-Kheti is regulary published by directorate for farmers.

Registrar and Comptroller are posted by State Govt for looking after the administrative and financial work of the University.The civil work of the University is performed by the Estate Officer.

Mission and Goals

The mandate of the university is to focus on quality teaching, research and extension education in the field of Agriculture and Allied Sciences.To achieve this mandate, the university offers

(i) Bachelor's, Master's and Doctoral degree programmes and short-term diploma/certificate courses in the disciplines of Agriculture including Basic and Applied Sciences, Agriculture Engineering and Technology, Dairy Science and Technology.

(ii) Development of climate resilient, bio-fortified varieties/hybrids of important cereals, pulses, millets, seed spices and horticultural crops suitable particularly for agro-climatic zones in the jurisdiction of this University.

(iii) Development of package and practices for various crops grown in region.

(iv) Efficient transfer of technology mechanism with the use of ICT for farmers and extension functionaries.

2. UNIVERSITY ADMINISTRATION

The Governor of the State is the Ex-Officio Chancellor of the University.The Board of Management (BOM) is the apex constitutional body of the University responsible for framing the new policy or amends the existing policy of the University. Other constitutional bodies of the University are Academic Council, Research Council and Extension Council.The academic bodies include Board of Studies and Committees of Courses at college and departmental level. The University has adopted the recommendations of Vth Deans Committee of ICAR to impart undergraduate programme.

2.1 Administartive officers : During reporting period, adminstativepositions in the University were borne by the following the officers :

Designation	Name	Contact No	Email
Vice-Chancellor	Prof. J. S. Sandhu	01425-254039	vc@sknau.ac.in
Registrar	Dr. I. M. Khan	01425-254980	registrar@sknau.ac.in
Comptroller	Sh. Babu Lal Banjara	01425-254988	comptroller@sknau.ac.in
Director Research	Dr. M.L. Jakhar	01425-254966	director.research@sknau.ac.in
Director Extension Education	Dr. B. L. Jat	01425-254035	director.ext@sknau.ac.in
Director Prioritization, Monitoring & Evaluation	Dr. S. K. Khandelwal	01425-254987	director.pme@sknau.ac.in
Director Education	Dr. N.K. Gupta	01425-254983	director.education@sknau.ac.in
Director Students' Welfare	Dr. I. M. Khan	01425-254982	dsw@sknau.ac.in
Director HRD	Dr. B.L.Kakraliya	01425-254914	director.hrd@sknau.ac.in
University Librarian	Dr. (Mrs.) Sunita Gupta	7357105495	librarian@sknau.ac.in
Dean, SKNCOA, Jobner	Dr. A. K. Gupta	01425-254022	dean.skncoa@sknau.ac.in
Dean, College of Agriculture, Lalsot	Dr. S. S. Yadav	9414820579	dean.coalalsot@sknau.ac.in
Dean, College of Agriculture, Kumher-Bharatpur	Dr. U. B. Singh	9414714234	dean.coabharatpur@sknau.ac.in
Dean, College of Agriculture, Fatehpur-Shekhawati	Dr. S. R. Dhaka	9414042027	dean.coafatehpur@sknau.ac.in
Dean, College of Agriculture, Navgaon	Dr. Shailesh Godhika	9461038993	dean.coanavgaon@sknau.ac.in
Dean, College of Agriculture, Kotputli	Dr. S. S. Manohar	9414349440	dean.coakotputli@sknau.ac.in
Dean, College of Agriculture, Baseri	Dr. D. K. Gupta	9414819414	dean.coabaseri@sknau.ac.in

Dean, College of Agriculture, Kishangarhbas	Dr. R. K. Sammuaria	9829611123	dean.coakishangarhbas@sknau.ac.in
Dean, SKN College of ABM, Jobner	Dr. A. R. K. Pathan	01425-254796	dean.sknabm@sknau.ac.in
Dean, COA,Jhilai, Niwai	Dr. R. P. Jat	9413119804	dean.coajhilai@sknau.ac.in
Dean, COA, Peethampuri	Dr. D. K. Gothwal	9928845911	dean.coapeethampuri@sknau.ac.in
Dean. COA, Bhusawar	Dr. R. S. Meena	9414543695	dean.coabhusawar@sknau.ac.in
Dean, CODT, Jobner	Dr. A. C. Shivran	9414517546	dean.dairytech@sknau.ac.in
Controller of Examination	Dr. K. C. Kumawat	9829636935	coe@sknau.ac.in
Estate Officer	Sh. L. B. Singh	01425-254982	estateofficer@sknau.ac.in

2.2 Head of Departments

The following senior faculty members headed different departments in the reporting year.

S. No.	Name of Department	Head	Contact No	Email
1	Agronomy	Dr. L.R. Yadav	9414518051	hod.agro@sknau.ac.in
2	Soil Science	Dr. Sunil Dadheech	9414385915	hod.soils@sknau.ac.in
3	Entomology	Dr. Akhtar Hussain	9414821555	hod.ento@sknau.ac.in
4	Plant Pathology	Dr. Mahabeer Singh	9460643240	hod.ppath@sknau.ac.in
5	Agricultural Extension Education	Dr. K.C. Sharma	7976584932	hod.ext@sknau.ac.in
6	Horticulture	Dr. L. N. Bairwa	9414932548	hod.hort@sknau.ac.in
7	GeneticsPlant Breeding	Dr. S.S. Punia	8005937536	hod.pbg@sknau.ac.in
8	Plant Physiology	Dr. Sunita Gupta	9414639561	hod.pphy@sknau.ac.in
9	Biochemistry	Dr. A. K. Gupta	9414820563	hod.pphy@sknau.ac.in
10	L.P.M.	Dr. Mahesh Dutt	9928402564	maheshdutt.lpm@sknau.ac.in
11	Ag. Economics	Dr. A. K. Gupta	9414003248	dean.skncoa@sknau.ac.in
12	Statistics	Dr. Kiran Gaur	8209292155	hod.statssknau.ac.in
13	Ag. Engineering	Dr. A. K. Gupta	01425254022	dean.skncoa@sknau.ac.in
14	Nematology	Dr. A. K. Gupta	01425254022	dean.skncoa@sknau.ac.in

2.3. Board of Management

Board of Management is the apex body responsible for the policy decisions of the University. BoM meetings are conducted at regular intervals. In 2021-22, four BoM meetings were conducted as per the following details.

S. No.	Number of BoM meeting	Date	Mode
1.	18th BoM meeting	13.07.2021	Virtual
2.	19th BoM Meeting	20.12.2021	Virtual
3.	20th BoM Meeting	11.01.2022	Virtual
4.	21st BoM Meeting	04.06.2022	Virtual

The following important decisions were taken in these meetings:

18th BOM Meeting

1. **Establishment of Community Health Center at Jobner:** Allocation of about 1.26 ha land for the establishment of community health care center in Jobner municipality, in which priority to be given to the staff and students of SKNAU, Jobner.
2. **Payment of Gratuity:** Proposal to make payments of gratuity including the interest earned from the bank accounts maintained by the University, on the basis of seniority of the employees retired between 01.01.2018 to 31.01.2018, was unanimously approved.
3. **Appointment of Games and Cultural Instructor in constituent colleges of the University:** To improve the quality of sports and games, provision of instructor and cultural instructor in each constituent college of the University has been approved.

19th BOM Meeting

1. **Land allotment to the newly constituted College of Dairy Science and Technology (CODST):** Fourteen hectares of land was allotted for the establishment of college building of College of Dairy Science and Technology (CODST), Jobner.
2. **Pension payments from Corpus Funds:** The payment of pension benefits to the retired employees to be done from Corpus Funds (Pension Funds) instead from University Provident Funds (UPF), on account of the letter of Deputy Secretary, Agriculture Department, Rajasthan dated 13.08.2021.
3. **Proposal for acceptane of NCC and NSS activities in newly established colleges:** Due to the lack of minimum requirement of 240 students for NCC Unit and 100 students for NSS Unit, students of newly established colleges get completely deprived of this opportunity, therefore a proposal to be sent to the state government for necessary amendments.
4. **Center of Excellence for Agricultural Electronics at Kherwadi Farm at RARI Durgapura:** One acre land laboratory for agricultural electronics to be established at Kherwadi Farm of RARI Durgapura, Jaipur in association with CEERI, Pilani.
5. **Arid Horticulture Research Sub-center, Asalpur:** Asalpur farm of SKNAU, Jobner now to be known as Arid Horticulture Research Sub-center, Asalpur, The center will give an impetus to ongoing researches at the University, varietal development, production and protection of medicinal and aromatic plants.
6. **Final Payment to seven employees with provident fund option (CPF opted):** A final payment of 07 retired employees for 1.25 crores against their (UPF+EPF) was agreed to be intiated.
7. **SKNAU to adopt Rajasthan Civil Service Pension Rules 1996:** SKNAU, Jobner would adopt Rajasthan Civil Service Pension Rules 1996, for the disposal of upcoming pension benefits, till the University has its own separate rules.

20th BOM Meeting

1. Approval of the lists of candidates to confer Bachelor's/ Master's/Doctoral Degrees and Gold Medals: Students who have completed all the requirements for their Bachelor's/Master's/ Doctoral Degrees by Dec. 31, 2021 were approved to confer their degree in 4th Convocation held on 21st Jan, 2022 on virtual mode. In total 790 undergraduate, 81 post graduate and 22 Ph.D. students were awarded the degree.

2.4 Academic Council

The academic council is the highest academic body of the University, the meeting of which is conducted at regular intervals. During reporting year, five academic council meetings were conducted as per the following details.

S. No.	Number of AC meeting	Date	Mode
1.	17th AC meeting	13.07.2021	Hybrid mode
2.	18th AC meeting	14.10.2021	Hybrid mode
3.	19th AC meeting	22.11.2021	Hybrid mode
4.	20th AC Meeting	10.01.2022	Hybrid mode
5.	21st AC Meeting	23.05.2022	Hybrid Mode

The following important decisions were taken:

17th Academic Council Meeting

1. **Approval of the qualifications for newly sanctioned posts:** The qualifications of newly sanctioned posts of Associate Professor and Assistant Professor (Dairy Sci. & Tech.), Asst. Professor (Phy. Education), Deputy Director Research (Seed/Agri Farms) and non-teaching posts were approved.
2. **Engaging Ph. D. students as Teaching Assistant for teaching UG/PG classes:** It was resolved to consider NET qualified Ph.D. final year students without fellowship for the award of Teaching Associate ship in their respective department. The amount of remuneration decided was Rs 500/- per class with a ceiling of 16 classes per month. One or maximum two Teaching Assistants could be engaged at a time in a department.

18th Academic Council Meeting

3. **Part time jobs to the needy and willing UG students:** The Student Welfare Assistantship Scheme (SWAS) to provide part time financial assistance vis-a-vis to impart practical skill to students on the principle of earning while learning during their study period was launched.
4. **Approval of the score card for direct selection of various teaching positions in the University:** The already approved score card for direct selection of various teaching positions in the University was further clarified for direct selection of various teaching positions in the University.

19th Academic Council Meeting

5. **Adoption of BSMA approved courses for M.Sc. and Ph.D. programme in the University:** It was resolved to adopt ICAR's Common Academic Regulations for ongoing PG and Ph.D. programmes in the University from Academic Session 2022-23.
6. **Provision to engage one Co-advisor/Co-supervisor from other organization:** A co-advisor/co-supervisor may be included in the advisory committee from other organization/ institute/Industry/private partners etc. in India or abroad, if providing fellowship/scholarship/research assistance to a M.Sc./ Ph.D. student.
7. **Approval of B.Tech. (Dairy Technology) degree of four-year duration and faculty of Dairy Science and Technology:** The B.Tech. (Dairy Technology) degree programme of four-year duration was

approved for the students studying in College of Dairy Science & Technology, SKNAU, Jobner. The faculty of Dairy Science & Technology, SKNAU, Jobner was also approved.

8. **Adoption of course curriculum & rules and regulations to run B. Tech. (Dairy Technology) programme in the University:** The course curriculum of B. Tech. (Dairy Technology) was approved. It was decided to adopt that the relevant rules and regulations pertaining to fee structure, examinations, promotion to higher classes, award of degree etc. will be adopted from existing rules and regulations of Faculty of Agriculture, SKNAU, Jobner covered under the UG Studies Regulation-2018.

20th Academic Council Meeting

9. **Conferring the Degree of D.Sc. degree (Honoris Causa) to Dr. T. Mahapatra:** The Academic Council decided to honour Dr. T. Mohapatra, DG, ICAR and Secretary, DARE, New Delhi with D.Sc. degree (honoriscausa) in fourth convocation on 21.01.2022 for his remarkable and outstanding contribution as a researcher, administrator and policy expert.

10. **Confirmation of the lists of candidates to confer Bachelor's/ Master's/Doctoral Degrees and Gold Medals:** Students who have completed all the requirements for their Bachelor's/Master's/ Doctoral Degrees by Dec. 31, 2021 were approved to confer their degree in 4th Convocation held on 21st Jan, 2022 on virtual mode. In total 790 undergraduate, 81 post graduate and 22 Ph.D. students were awarded the degree. The Gold Medals were awarded to UG and PG students. The Chancellor's Gold Medal, Vice Chancellor's Gold Medal and University Gold Medal were awarded for securing I, II and III positions in Ph.D.

2.5 Staff Strength

The sanctioned post of teaching is 442, out of which 187 posts were filled and 255 posts were vacant. During the reporting year, 118 new positions including 54 posts of teaching cadre under the state plan for three new agriculture colleges at Bhusawar (Bharatpur), Peethampuri (Sikar), Jhilai (Tonk) and one Dairy Science & Technology College, Jobner have been sanctioned by the Govt. of Rajasthan. Similarly, the sanctioned post of non-teaching staff is 763, out of which 285 posts were filled and 478 posts were vacant reporting year.

Sanctioned and filled post of teaching staff (As on 30.06.2021)

Head	Professor		Associate Professor		Assistant Professor		Programme Coordinators		SMS		Total	
	S	F	S	F	S	F	S	F	S	F	S	F
Non-Plan	9	2	43	5	162	81	0	0	0	0	214	**88**
State Plan	0	0	23	4	105	29	0	0	0	0	128	**33**
ICAR	2	0	13	8	36	25	0	0	0	0	51	**33**
KVK's	0	0	0	0	0	0	7	5	42	28	49	**33**
Total	**11**	**2**	**79**	**17**	**303**	**135**	**7**	**5**	**42**	**28**	**442**	**187**

Sanctioned and filled post of non-teaching staff (As on 30.06.2021)

Head	Officer		Ministerial		Technical		Supporting		Total	
	Sanctd	Filled	Sanctd	Filled	Sanctd	Filled	Sanctd	Filled	Sanctd	Filled
Non-Plan	7	4	77	35	105	52	173	80	**362**	**171**
State Plan	40	15	91	42	89	9	67	14	**287**	**80**
ICAR	0	0	0	0	47	20	4	1	**51**	**21**
KVK's	0	0	14	2	35	05	14	06	**63**	**13**
Total	**47**	**19**	**182**	**79**	**276**	**86**	**258**	**101**	**763**	**285**

The University has employed teaching and non-teaching staffs form all the categories of staff. A breakup of these positions is given below for the reporting year.

S.No.	Category	Teaching staff		Total	Non-Teaching staff		Total
		Male	Female		Male	Female	
1.	General	72	21	**93**	148	15	**163**
2.	SC	29	3	**32**	25	7	**32**
3.	ST	21	0	**21**	14	2	**16**
4.	OBC	28	2	**30**	58	5	**63**
5.	Handicapped	4	0	**4**	1	0	**1**
6.	Minority	7	0	**7**	10	0	**10**
	Total	**161**	**26**	**187**	**256**	**29**	**285**

- **Promotion of Non teaching staff through DPC:** The DPC of non teaching staff has been done during the repoting period and in total 20 non teaching staff (Section Officer- 6, Asstt. Section Officer-3, Clerk Gr.I- 6, Clerk Gr.II- 1, Asstt. Agri. Officer-1 and Sr. Tech. Assistant- 3) were promoted on various positons in non teaching cadre.

2.6 University Budget:

The University receives budget from various sources like State Govt., ICAR, own income, research projects, sponsored projects etc. to support education, research and extension activities. A total fund of Rs 13228.85 lakhs was received during the year 2021-22.This budget comprised of 60.40% from state government, 28.97 % from ICAR and 10.63% from own resources.

Head wise budget allocation in 2020-21 (Rs. in lakhs)

Head	Salary	TA	Recurring	Non-Rec	Civil	Total
State Fund	6340.37	36.50	774.57	335.03	674.17	8160.64
Total	**6340.37**	**36.50**	**774.57**	**335.03**	**674.17**	**8160.64**
ICAR						
DS grant	0	0	125.10	0.30	55	**180.40**
AICRP 75:25	1150.83	9.09	114	0	0	**1273.92**
100% ICAR Adhoc Project	0	0	0	33.60	0	**33.60**
MAG Project	0	0	131.90	0	0	**131.90**
NAHEP	0	0	400	0	200	**600**
KVKs	800	15.15	138.85	27	0	**981**
Total	**1950.83**	**24.24**	**909.85**	**60.90**	**255**	**3200.82**
Others	0	0	0	0	0	0
OCS	14	1.70	57.49	0	64.50	137.69
RKVY	0	0	148.37	0	0	148.37
PVTs	0	0	90.55	0	0	90.55
Grand Total	**14**	**1.70**	**296.41**	**0**	**64.50**	**376.61**

Details of budget received from different source during 2021-22 (Rs. In Lakhs)

Source	Amount	Precent of Total Budget
Internal revenue	1292.54	14.38
State Government	7690.00	85.62
Total	**8982.54**	**100**
ICAR		
DS grant	58.35	2.21
AICRP 75:25	1157.17	43.89
ICAR 100%	102.43	3.88
KVKs	1318.49	50.02
Total	**2636.44**	**100**
OCS	408.19	25.35
NAHEP	787.90	48.95
(RKVY)	300.00	18.64
PVTs	113.78	7.06
Total	**1609.87**	**100**
Grand Total	**13228.85**	

Head wise Expenditure on different activities (Rs. in lakhs)

Source	Amount (In Lakh)
State fund	7690
Education	36.21
Research	1639.28
Extension	1092.29
PVT	40.15
OCS & MAG	53.17
Others (RKVY)	147.17
NAHEP	303.99
Total	**11002.26**

3. EDUCATION

SKN Agriculture University, Jobner rolls education as one of its prinicpal mandates, like any other agricultural university of the country. Currently, there are three faculties' viz., faculty of Agriculture, Dairy Science & Technology and Agri-Business Management, carrying out this mandate in the University.

Academic programmes

The University has thirteen constituent colleges within a territorial jurisdiction of 8 districts of Rajasthan to conduct the mandated education in the area of agriculture and allied sciences. Presently, the University offers two Bachelor degree programmes- B.Sc. (Hons.) Ag., B.Tech. (Dairy Science), Masters degree programmes in 10 disciplines and Ph.D. programme in 7 disciplines of agriculture. SKN College of Agri-Business Management, Jobner offers B.Sc.(Hons.) Ag. and MBA in Agri-Business Management.

Admission to Bachelor degree programmes

The University admits students to Bachelor degree programme through Joint Entrance Test (JET) according to Government of Rajasthan and ICAR norms. In the reporting year, JET was organized by SKN Agriculture University, Jobner. As per the ICAR direction 20 per cent of the seats were reserved for ICAR-NTS candidates. In 2021-22, a total of 2206 undergraduate students of all the years were on-rolls in different constituent colleges of the University.

Admission to Masters and Ph.D degree programmes

SKN Agriculture University, Jobner continues to attract students seeking admission in M.Sc. and Ph.D. programme. A candidate aspiring to get admission in PG studies should have a graduate degree of the related field with an OGPA not less than 6.00/10.00. The admissions in M.Sc and Ph.D. are made through Pre-PG/Ph.D state level enterance examinatiom.The intake capacity for Post Graduate programmes in a particular discipline is fixed on the basis of infrastructure of the concerned department and the availability of experts/recognized teachers in the department. The SKN College of Agriculture, Jobner is the only college that offers Post Graduate courses in 10 disciplines with 79 seats including 18 seats of ICAR, New Delhi. In this college, the Ph.D. Programme is being offered in 7 disciplines with total 24 seats.

Students' strength

During the academic year 2021-22, the total number of students on rolls was 2433 in different degree programmes (B. Sc.: 2206, in M.Sc.: 160 and Ph.D.: 67) in all constituent colleges of the University. Besides, 9 private undergraduate Agriculture colleges and 2 Govt. colleges are also affiliated with the University, which admitted 1010 students during 2021-22 through JET. In 2021-22, total 3180 students were enrolled in all the classes in these affiliated colleges. Thus, in reporting year total 5613 students were enrolled in all the constituent as well as affiliated colleges in all degree programmes.

Table 2. Student's strength in undergraduate programme in affiliated colleges.

S. No.	Name of the College	Year of	Number of students in each year establishment					Total
			I	II	III	IV	V	
1	Sri Karan Narendra College of Agriculture, Jobner (Jaipur)	1947	126	122	127	115	-	490
2	College of Agriculture, Lalsot (Dausa)	2007	57	58	58	52	-	225
3	College of Agriculture, Fatehpur-Shekhawati (Sikar)	2013	64	64	62	54	-	244
4	College of Agriculture, Kumher (Bharatpur)	2013	54	62	58	56	-	230
5	College of Agriculture, Navgaon	2018	61	64	60	53	-	238
6	College of Agriculture, Gonera, Kotputli	2019	56	56	57	-	-	169
7	College of Agriculture, Basedi	2019	55	60	58	-	-	173
8	College of Agriculture, Kishangarhbas, Alwar	2020	59	57	-	-	-	116
9	SKN College of Agri-Business Management, Jobner	2016	-	-	56	108	4	168
10	College of Agriculture, Jhilai	2021	40	-	-	-	-	40
11	College of Agriculture, Bhusawar	2021	38	-	-	-	-	38
12	College of Agriculture, Peethampuri	2021	40	-	-	-	-	40
13	College of Dairy Science & Technology, Jobner	2021	35	-	-	-	-	35
	Total (A)		**685**	**543**	**536**	**438**	**4**	**2206**

Table: Students' strength in undergraduate programme in affiliated colleges.

S. No.	Name of the College	Year of	Number of students in each year establishment					Total
			I	II	III	IV	V	
1	B.B.D. Govt. P.G. College, Chimanpura-Shahpura (Jaipur)	1984	59	59	56	51	-	225
2	Government College, Uniara (Tonk)	2013	60	60	58	57	-	235
3	Dayanand College, Ajmer	1959	60	60	60	56	-	236
4	M.B. Agriculture College, Tonk	2013	120	109	52	52	-	333

5	Late Mool Chand Meena Agriculture College, Lalsot (Dausa)	2013	119	112	55	56	-	342
6	Pt. Deen Dayal Upadhyay Agriculture College, Deoli, (Tonk)	2015	120	114	109	105	-	448
7	Maharaja Surajmal Agriculture College, Rahimpur, (Bharatpur)	2015	120	109	52	-	-	281
8	O. P. Agriculture College, Budhwal, Behror (Alwar)	2015	59	54	50	51	-	214
9	G. L. Memorial Agriculture College, Kishangarh Bas, Alwar	2016	120	115	55	55	-	345
10	Rukmani Devi Memorial Ag. College Mandawar (Mahua), Dausa	2018	60	54	49	41	-	204
11	Shekhawati Institute, Sikar	2019	113	108	96	-	-	317
	Total (B)		**1010**	**954**	**692**	**524**	**-**	**3180**
	Total (A+B)		**1695**	**1497**	**1228**	**962**	**4**	**5386**

Table: Department-wise intake capacity and enrolment of students in M.Sc and Ph.D. programme.

S. No.	Name of the Department	Intake capacity		Total enrolment (including students of all years)	
		PG	Ph.D.	PG	Ph.D.
1	Agronomy	10	04	20	11
2	PBG	10	04	24	11
3	Horticulture	10	04	20	11
4	Extentsion Education	09	02	17	05
5	Soil Science	08	02	15	05
6	Plant Pathology	08	04	15	11
7	Entomology	07	04	15	13
8	Ag. Econiomics	07	-	13	-
9	Plant Physiology	05	-	12	-
10	LPM	05	-	09	-
	Total	**79**	**24**	**160**	**67**

Genderwise and revervation categories wise distribution:

The enrolled students of the University represent almost all the caste categories of the society i.e. General, SC, ST, OBC, handicapped and others. There is a decent number of girl students in UG as well as PG programmes. The boys to girls ratio is 1.66, 1.25 and 1.58 in UG, PG and Ph.D., respectively.

Table: Category wise students enrolled in different degree programmes in constituent colleges of the University.

Class	UG			PG			Ph.D.			Grand Total
Category	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
General	208	202	410	45	36	81	24	12	36	527
S.C.	203	79	282	13	06	19	05	01	06	307
ST	107	61	168	06	01	07	02	03	05	180
OBC	692	409	1101	19	13	32	10	06	16	1149
MBC	46	20	66	04	03	07	0	01	01	74
PH	27	17	44	02	06	08	0	03	03	55
Defence	10	09	19	0	6	06	0	0	0	25
EWS	71	18	89	0	0	0	0	0	0	89
SBC	04	05	09	0	0	0	0	0	0	09
Minority	10	08	18	0	0	0	0	0	0	18
Total	**1378**	**828**	**2206**	**89**	**71**	**160**	**41**	**26**	**67**	**2433**

Hostel facilities

Sri Karan Narendra College of Agriculture, Jobner had 4-boys' and 2-girls' hostels with total 414 spacious rooms to accommodate 319 boys and 221 girls totalling 589 students. Each hostel includes the facilities like common room with LED TV & Tata Sky dish connection, large mess, furnished dining hall, geysers, water coolers, RO, internet and Wi-Fi connectivity etc. A new girl's hostel with the capacity of 125 girls is also under construction to expand the University's accompdation capacity. Besides this, a Gautam transit hostel is also available for short term stay.

College of Agriculture, Lalsot is having two boys' hostels with an accommodation capacity of 92 students. The hostels are equipped with all facilities like RO for drinking water, LED TV with dish connectivity, Common room with 30 chairs, two dining halls and mess facility, indoor and outdoor games facilities. One girls' hostel with an accommodation capacity of 36 girls is under construction.

College of Agriculture, Fatehpur is having one girl's hostel having the capacity of 44 students. The hostels are equipped with all high- tech facilities like RO for drinking water, LED TV with dish connectivity, coolers, geysers, three-seater chairs, common room, dining hall and mess facility, table tennis and badminton game facilities. First floor of guest house is utilized as boy's hostel and apart from girl's hostel, four quarters of ARS are also utilized to accommodate the girls.

College of Agriculture, Kumher, Bharatpur have one girls' hostel with the capacity to accommodate 24 students.

Academic achievements:

Examination and declaration of Results

The second semester examinations of B. Sc. (Ag) Hons. Pt. II to IV for academic session 2020-21 was held from 23 September to 23 October, 2021 and for B. Sc. (Hons.) Ag.Pt. I from 26 November to 7 December, 2021. The examinations for I semester of B. Sc. (Hons.) Ag. Pt- I, III & IV of academic session 2021-22 were held during 17 Febuary to 16 March, 2022 and for B. Sc. (Ag) B. Sc. (Hons.) Ag. Pt. II from 8-25 April, 2022. The Provisional Degree Certificates (PDCs) were issued to the students who cleared the examinations. The result of I semester of academic session 2020-21 was declared in the month of July, 2021 and December, 2021, whereas, result of II semester of academic session 2020-21 was declared March and April, 2022. The result of I semester of B.Sc. (Hons.) Ag.Pt.I of academic session 2021-22 was declared in the month of June, 2022.

The number of students obtaining M.Sc. (Ag.) and Ph.D. degrees in academic Session 2021-22 were 84 and 39, respectively.

Number of students completed Masters and Ph.D. degree during the year

S. No.	Discipline	Masters degree	Ph. D. degree	Total
1.	Agronomy	11	07	18
2.	Agricultural Economics	09	-	09
3.	Plant Breeding & Genetics	05	05	10
4.	Horticulture	10	04	14
5.	Entomology	05	06	11
6.	Extension Education	15	05	20
7.	Soil Science	10	03	13
8.	Plant Pathology	07	09	16
9.	Plant Physiology	02	-	02
10.	Livestock Production Management	05	-	05
11.	Nematology	04	-	04
12.	Biochemistry	01	-	01
	Total	84	39	123

Students exchange under MoUs

This University has signed MoUs with the reputed Universities and institutes of India. Two students of Department of Plant Breeding and Genetics and one student of Department of Horticulture, SKN College of Agriculture, Jobner are doing their Ph.D. research work at ICAR-CSSRI, Karnal and MPUAT, Udaipur, respectively under MoU's.

University Convocation

SKNAU, Jobner solemnized 4th Convocation on 21st January, 2022 under the Chairmanship of Hon'ble Governor and Chancellor, Rajasthan Shri Kalrajji Mishra and delivered convocation address. Sh. Ramesh Chand ji, Member, Niti Ayog, Govt. of India graced the function as Convocation Guest, Sh. Lalchand ji Kataria, Hon'ble Agriculture Minister, Rajasthan and Dr. Trilochan Mahapatra, DG & Secretary, ICAR, New Delhi also garced the function as special guest and Prof. Jeet Singh Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner presided over the function. In the glittering function, 8 meritorious students conferred with Gold Medal and 891 students awarded UG, PG and Ph.D degrees. Dr. Trilochan Mahapatra, DG and Secretary, ICAR, New Delhi conferred *honoris causa* D. Sc. degree.

4th Convocation

Hon'ble Governor and Chancellor at University Convocation

Student Placements

SKN Agriculture University fecilitates the graduates in finding the right placement based on their personal competence. A student database and separate alumni facebook page has been maintained by the University Placement Cell, which connects both the candidates and the prospective firms. Apart from this, several lectures/interaction programmes regarding placement and opportunities for higher education are organized under IDP-NAHEP and Career Development Centre, SKNAU, Jobner in different centres of the University.

Continuous efforts were made during 2021-22, so that University students could get the opportunities in national and international sectors, agro-based companies and Universities etc. The agro-based companies and organization which approached the University for finding suitable candidates as per their requirements in last year were Sutlej Textiles & Industries Ltd, Viterra India Pvt. Ltd., Jaivik Food and Research Pvt. Ltd., PHI Seeds Pvt. Ltd. (Corteva Agriscience), Rajasthan Grameen Ajeevika Vikas Parishad (RGAVP), End Poverty Organization, Shree Shubham Logistics, SK Finance Limited, Freshokartz Agri Products Pvt. Ltd., a leading Full Stack Agritech startup and Advanta Seeds (a part of UPL). University availed all the candidate details, staff and infrastructural assistance to organize tests, Group discussions and Personal interviews.

A handsome number of 189 got placement in different organization. 10 students were selected in the Universities as Assistant Professor and 4 students as Subject Matter Specialist, 10 students as Agriculture Officers, 6 students as Agriculture Resesrch Officer, 1 student as STO and 130 students as Agriculture Supervisor in the Govt. of Rajasthan. 11 students got job in Banks, 02 student selected as Project Management Trainee in Advanta Seed, 01 student was selected in Vitera Seed, 2 students as Field Officer in the UPL & 1 in Coromandal, 4 trrainees in VNR seeds and one student selected as Buisness Development Executive in BYJU'S. One student was selected as Assistant Professor in private college. Three students were selected as SRF in research projects at various organizations. Three students has become an entrepreneur and established self entreprunial units.

Scholarship/Fellowship to the University Students

There is a provision of fellowships at SKNAU, Jobner for the meritorious and socially & financially weak students from ICAR, Govt. of Rajasthan, University and private organizations. It is noticed that a gradual increment in the number of students got scholarship/fellowship during last four academic years. More than 12% incremental improvement in fellowship / scholarship receiving by the students during the academic year 2021-22 as compared to academic year 2020-21.

Table: Details of scholarship/fellowship during academic session 2021-22

S.No	Name of Scholarship	No. of Students Awarded	Amount in Rs. / Year
1.	State Scholarship (SC, ST, OBC) Sponsored by GOR	532	4242750
2.	ICAR -JRF	11	660000
3.	ICAR -AIEEA	10	360000
4.	Fellowship from National Private Bodies- Dhanuka	5	300000
5.	Incentives for Girls Students (UG)	764	9168000
6.	Incentive for Girls Students (M.Sc. & Ph.D.)	101	1332000
7.	Workers Education and Skill Development Scheme	6	60000
8.	Merit scholarship Ph.D.	8	150000
9.	Merit scholarship M.Sc.	12	187200
10.	International fellowship on bioversity	01	231000
	Total	**1450**	**16690950**

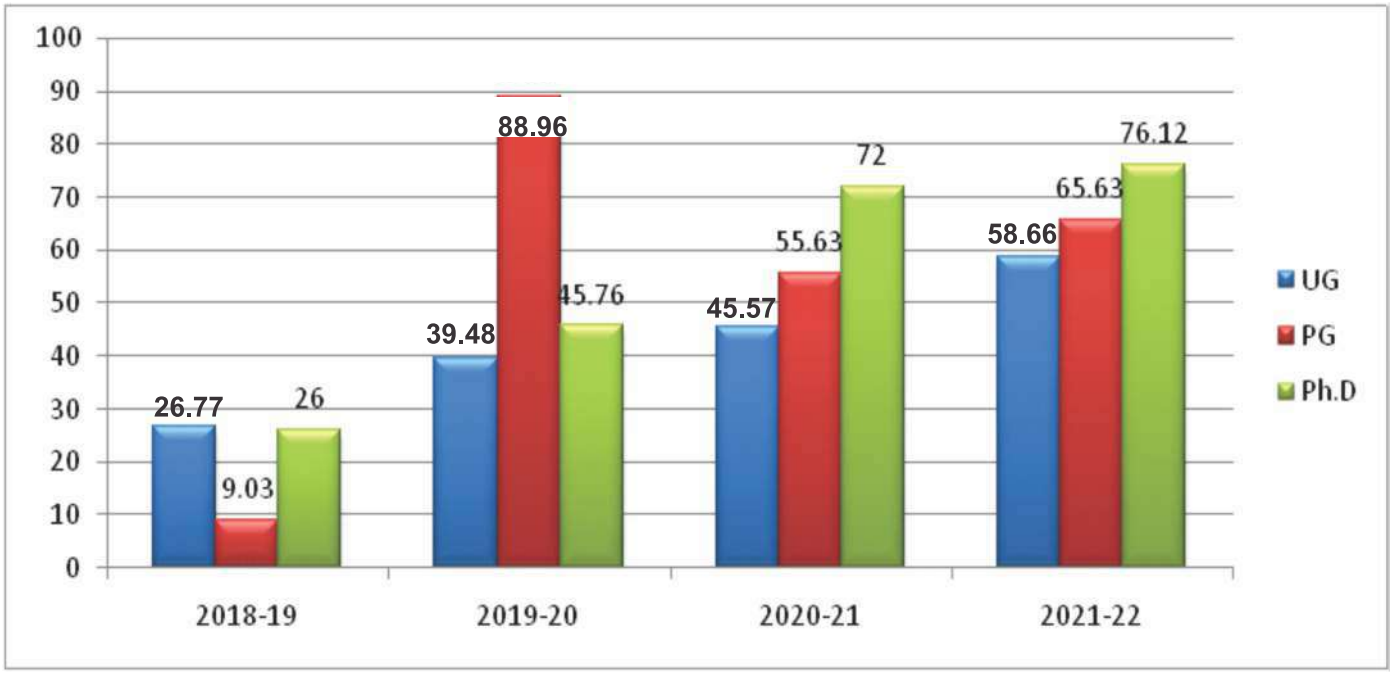
Under UG programme,out of 2206 students 1294 students (58.66%) and in M.Sc. out of 160 students enrolled,105 (65.63%) received fellowships/ scholarship. In the case of Ph.D, 51 (76.12%) students out of 67 students are receiving fellowship/scholarship. Ms. Pooja Sharma, Ph.D. student in the Department of Horticulture, SKNCOA, Jobner received International Fellowship (Rs. 2.31 lakh per year) from Bioversity International via di San Domenico, Rome, Italy Alliance between Bioversity and International Centre for Tropical Agriculture (CIAT), Rome under the project of Fruitful lands India: Harnessing fruit tree biodiversity as a nature based solution for food, security, nutrition, human and planetary health.

Table: Number of students availed Scholarship / Fellowship during last four years

Academic Years	U.G. Students		P.G. Students		Ph.D. Students	
	Total Students	Fellowship Awarded	Total Students	Fellowship Awarded	Total Students	Fellowship Awarded
2018-19	1195	320 (26.77)	155	14 (9.03)	50	13 (26.00)
2019-20	1725	681 (39.48)	145	129 (88.96)	59	27 (45.75)
2020-21	1951	889 (45.57)	151	84 (55.63)	50	36 (72.00)
2021-22	2206	1294 (58.66)	160	105 (65.63)	67	51 (76.12)

Note: Figures in parantheses represent the percentage figures to the respective degree programme

Percentage of students got scholarship/fellowship during last four years



Academic Excellence

One student of Entomology got SRF and admitted in HAU, Hisar. Ten students secured JRF (Junior Research Fellow) and 15 Non-JRF seats and joined post graduation programme at various State Agricultural Universities. Eleven students qualified NET examination conducted by ASRB (ICAR), New Delhi. A total of 11 students of SKNCOA, Jobner got admission in the Ph. Dprogramme and 103 students of SKNCOA, Jobner and other constituent colleges of the university got admission in PG programme in various State Agriculture Universities. Four students got admission in B.Ed. programme.

Awards and recognition to students

- Miss Pooja Shekhawat and Miss. Anjani Agrawat student of COA, Basedi received district awards under NSS programme from State Youth Parliament Rajasthan on 25 Feb., 2022.
- Ms. Monika Gurjar student of SKNCOA, Jobner, Ms. Sarita Gurjar, Student of COA, Kotputli, Ms. Rekha Gurjar and Ms. Rajbala Gurjar students of COA, Lalsot were awarded a scooty on 10 December 2021 under Devnarayan Free Scooty Scheme for scoring more than 7.5 OGPA.
- Dr. Tejpal Bajya, a Ph. D. student, Department of Plant Pathology, SKN College of Agriculture, Jobner was awarded Chancellor's Gold Medal.
- Dr. Lalita Lakhran, Ph.D. student of Department of Plant Pathology, SKN College of Agriculture, Jobner was awarded Vice Chancellor's Gold Medal.
- Dr. Priyanka, Ph.D student of Department of Plant Pathology, RARI, Durgapura was conferred with University Gold Medal.
- The receipients of M.Sc. Gold Medal in Crop Improvement Group was Mr. Azad Singh Rathore (Plant Physiology), in Crop Improvement Group was Ms. Sunita Kanwar (Soil Science), in Crop Protection Group

was Ms. Arpana (Plant Pathology) and Ms. Ayana Mohan was the reciepient of Gold Medal in Social Science Group.

- Ms. Priyanka Kantwa, B.Sc. (Hons) Ag. was conferred with the University Gold Medal for Undergraduate programme.
- Dr. H. P. Verma student was awarded best Ph.D. Thesis award for year 2017 by Indian Society of Agronomy during fifth International Agronomy Congress held at PJT SAU, Hyderabad during 23-27, Nov. 2021.
- Alumni of COA, Fatehpur Sh. Omprakash Godara secured 1st rank in Rajasthan in Agriculure Supervisor competitive examination.

Other Co-curricular activities

Orientation Programme

The orientation of newly admitted students of all the constituent colleges was conducted in the month of September, October and in the respective colleges. The newly admitted students of B Sc (Ag), M. Sc. and Ph. D. students were made aware about different college activities regarding the academic, cultural, NCC, NSS, Games and sports, Library, hostel facilities etc, different rules, regulations and other facilities available. Orientation Programme of SKNCOA, Jobner was organized on 27-28 September, 2021, COA, Kotputli on 05 October, 2021, COA, Navgaon and COA, Jhali, Tonk on 06 Oct., 2021, COA, Lalsot and COA, Bharatpur on 23 Oct., 2021, COA, Kishangarh Bas on 15 November, 2021, COA, Fatehpur- Shekhawati on 26 Oct., 2021, COA, Peethampuri (Siker) on 11 Oct., 2021, and COA, Basedi on 20 Oct., 2021.

Orientation programme at COA, Navgaon

Orientation programme at COA, Kotputali

Rural Entrepreneurship Awareness Development Yojana (READY)

Rural Entrepreneurship Awareness Development Yojana (READY), to reorient the agriculture graduates for entrepreneurship development, under went at all the constituent colleges of SKNAU for final year students. This programme includes Rural Awareness Work Experience and Agro Industrial Attachment (RAWE & AIA) and Experimental Learning. In the first week of Aug, 2021, on campus training was given to the READY students by university faculties. Subsequently students were attached to different villages for practical extension works for 56 days and to Units viz., KVKs, research stations and colleges for 35 days. From the third week of Nov. 2021 students were attached to different Agro-Industries for 3 weeks, where they gained the practical industrial experience. In the second leg of READY programme, students were attached for six months, to the technical departments of the college for the experimental learning and their work performances were evaluated by respective committees at the end. Along with this, students under READY Programme also participated in different plantation activities, awareness campaigns and celebration of important days like Mahila Kisan Diwas, Agricultural Education Day etc.

READY Students of COA, Fatehpur in village attachment

READY Students of COA, Navgaon in village attachment

READY Students in KVK Attachment

Agricultural Experiential Learning Programme (AELP)

In the third phase of READY programme, students were attached to different experiential learning (EL) units for 24 weeks from 20 Jan., 2022 and 14 April, 2022 in two sub-phases at each centre. At SKNCOA, Jobner there were total 14 EL units viz., i. Medicinal Plant and Plant Tissue Culture Technology (PBG department), in which 23 students were attached, ii. Seed Production Technology Unit (PBG department) trained 19 students, iii. Mass Production of Bio agent and Bio Pesticide (Entomology department), attached 23 students, iv. Production technology of Bio agent (Pathology Department), in which 23 students were attached, v. Commercial Horticulture and Nursery management; and Seed production technology at Asalpur farm, in which 17 students were attached, vi. Seed production technology (ATIC), Directorate of Extension Education trained 15 students vii. Milk processing and packaging unit at ATIC & University Dairy attached 15 students, viii. Commercial horticulture

READY Students of SKNCOA, Jobner in AELP

READY Students of SKNCOA, Jobner in AELP

(Horticulture Dept.), in which 18 students were attached ix.Floriculture & Landscaping unit, Commercial Horticulture (Horticulture Dept.) trained 18 students, x. Commercial poultry production technology and Commercial goat production (LPM department), in which 28 students were attached, xi. Milk processing & packaging, (University Dairy Unit), trained 18 students, xii. Production technology of Bio agent (Nematology Dept. trained 23 students) xiii. Agricultural waste management (Soil Science Department) attached 21 students, xiv. Application of plant growth regulators in agriculture and techniques for plant sample analysis (Plant Physiology) gave experiential learning to 19 students.

Similarly in COA, Lalsot three Experiential Learning Units were functioning namely Commercial Horticulture, Mushroom Production and Preparation of Vermi-compost, Azolla and Liquid Organic Manure, in which 17, 17 and 18 students were attached, respectively. There were three Experiential Learning Units for READY students *viz.*, Seed Production Technology, Agricultural waste management and Commercial Horticulture, which trained 17, 18, 19 students, respectively at COA, Navgaon. At COA, Bharatpur, two Experiential Learning Units namely, Agricultural waste management and Food processing registered 57 students each.

Display of products prepared by READY students in Agri-Expo

National Cadet Core (NCC)

First year cadets were enrolled into NCC through written, Physical Efficiency Test (PET) and interview on 3 October, 2021. All the cadets registered themselves in DG NCC digital portal, wherein various competitions and events for the NCC cadets were organized from time to time. Amid COVID-19, NCC cadets played crucial role in delivering their disciplinary duties while conducting different awareness programmes in the University, celebrating days of National importance such as Kargil Vijay Diwas, Independence Day, Republic Day, Mahatma Gandhi Jayanti, Constitution Day and organsing important events like Agri-Expo, 2022 etc.The commanding officer of 1st Rajasthan NCC battalion Jaipur Lt. Col. Bhawani Singh inspected NCC unit of S.K.N. College of Agriculture, Jobner on 1 October 2021 and checked documents, infrastructure and interacted with NCC cadets. Apart from this, the NCC cadets also actively participated in cleaning and weeding activities in college campus, shiv mandir and guest house.

Participation and Medals Wins of NCC Cadets in Annual Training Camp

- Total 59 cadets of SKNCOA Jobner participated in Combined Annual Training Camp organized by 1 Raj NCC Battalion at SBN PG College, Jaipur in two phases from 24 Aug., 2021 to 16 Sep., 2021. In these camps cadets got training of arms and ammunition, firing, map reading, drill, formation of Platoon and Battalion. NCC cadets also participated in different competitions organized during the camp and bagged

total 20 medals. Poonam Jakhar and Sanju Choudhary won gold and silver medal, respectively in firing competition, Rakshita fetched gold in debate Competition. Nishchay Asija, Srichand Saini won Gold in Solo Dance, Jyoti Soni won gold in solo dance, solo singing and debate competition. Monika Gurjar, Kajal Yadav, Jyoti Khokhar, Manisha Choudhary, Pooja Takhar and Priyanka Kumawat won silver in Group Dance. Deepika Khichar, Amisha Choudhary and Rakhi Sharma won Bronze in group dance. In addition, three SW cadets namely Rakshita, Amisha and Poonam Jakhar selected for Pre RDC-camp.

- Total 29 cadets of SKNAU, Jobner got 'B' Certificate and 31 cadets obtained 'C' Certificate this year. All the NCC cadets have registered themselves on the digital platform of NCC Alumni Association and are now the life member of NCCAA.

- National Service Scheme is underway at all the constituent units of SKNAU, Jobner to infuse a sense of social responsibility among UG students. Under this scheme various activities and programmes like awareness programmes, rallies, blood donation camps, COVID-Vaccination camps, lecture, poster, song, and speech competition were organized by NSS Units. All the NSS students did shramdan in the different cleaniliness drives, and contributed significantly in organizing important events like Agri-Expo 2022, Annual Day celebrations, Farmer's Fair etc.

READY Students of COA, Fatehpur in village attachment

- NSS students of all the constituent centers enthusiastically celebrated important days likeIndependence Day (15th Aug., 2021), NSS Day (24th Sep., 2021), World Food Day(16th Oct., 2021),Satarkata Jagrukata Karykaram (21st Oct., 2021), International Day for the Elimination of Violence against Women (25th Nov., 2021), Indian Constitution Day (26th Nov., 2021), World Aids Day (1st Dec., 2021), Kisan Diwas (23rd Dec., 2021), National Consumer Day (24th Dec., 2021), National Youth Day (12th Jan., 2022), National Girl Child Day (24th Jan., 2022), National Voters Day (25th Jan., 2022), Republic Day (26th Jan., 2022), Women Day celebration (8th March, 2022), World consumer rights day (15th March, 2022), Shaheed Diwas (23rd March, 2022), World Water Day (22ndMarch, 2022) and World Health Day (07th Apr., 2022).

- Apart from this, the Seven Days special training camp was also organized at all the centres for the students. At SKNCOA, Jobner is was organized in two phases from 23-29 October, 2021 and 09-15 March, 2022, at SKNCABM, Jobner from 23-29 October, 2021, at COA, Lalsot (Dausa) from 26 October to 01 November, 2021, at COA, Basedi (Dholpur) from 23-29 November, 2021 and 21-27 March, 2022 , at COA, Bharatpur from 23-29 October, 2022, at COA, Navgaon (Alwar) from 22-28 November, 2021 at COA, Kishangarh Bas from 20-26 March, 2022 and at COA, Kotputali from 22-28 October, 2021. In addition to this, Dr. J.K.Bana , Programme officer (NSS) and 10 NSS volunteers participated in NSS RD camp at Kolkata in collibration with Raja N. L. Khan Women's College Medinipur, Distt. West Medinipur, West Bengal from 25 to 31 May, 2022. Mr. Rohit Jeengar and Ms. Munia, NSS Volunteers, NSS Unit SKNCOA, Jobner participated in National Youth Festival-2022, Punducherry from 12 to 16 January, 2022.

- **NSS Officers participation in Trainings:** Dr. H.S. Jatav, Programme officer (NSS) COA, Fatehpur participated in 7 day online orientation training programme from 10-16 Feburary, Dr. B.S. Chandrawat, Programme officer (NSS) SKNCOA, Jobner and Dr. J.K. Bana, Programme officer (NSS) COA, Lalsot participated from 05 to 11 March, 2022 and Dr. Lokesh Kumar Jat, Programme officer (NSS) COA participated from 21-27 March,2022 organized by MPUAT, Udaipur and Regional Directorate, NSS office, Jaipur.

NSS Special Seven Days Camps at constituent Collges of SKNAU, Jobner

Literary and Sports activities

1. Awareness Elocution Competition:

SKN Agriculture University, Jobner organized an eluction competition on 25th October, 2021 in the conference hall, SKNCOA, Jobner on the topic : स्वतंत्र भारत@75 : सत्य निष्ठा से आत्मनिर्भरता (Independent India@75: Self Reliance with integrity). In this competition, many students of SKNCOA, SKNCABM and College of Dairy Science & Technology, Campus Jobner and COA, Bharatpur took part. Ms. Isha Pareek, B.Sc. Part IV student won the gold, Ms. Vartika Singh, B.Sc. Part IV student won the silver and Ms. Sonam, B.Sc. Part III student won the bronze in the competition. The Vigilance department of State Bank of India, Local Head Office, Jaipur sponsored the Gift hamper prize of Rs. 2000/- 1500/- and 1000/- to the first, second and third winner of the competition, respectively.

2. Intercollegiate Elocution Competition:

An Intercollegiate Elocution Competition was organized from SABI, SKNAU, Jobner on 25 Oct., 2021 through online mode, in which total 12 students of SKNCOA, SKNCABM, CODST,Jobner, COA, Navgaon, COA, Fatehpur and COA, Lalsot participated. The winner of this Intercollegiate Elocution Competition Ms. Devika Jha and Ms. Vartika Singh from SKNCOA, Jobner were shortlisted as the representative participants for the Zonal NAAS Elocution Competition, which was organized on 27 Oct., 2021.

3. Zonal NAAS Elocution Competition

Zonal NAAS Elocution Competition was held on 27.10.2021 (Online) amongst 14 students of Six Agriculture Universities on the topic: “Energy and Agriculture Challenges for 21st Century” in which Ms. Devika Jha, and Ms. Vartika Singh from SKNAU, Jobner participated online.

4. Poster and Essay Competition at COA, Navgaon

Poster competition at COA, Navgaon was organized on world environment day 05.06.2022 and total 17 students were participated in Essay Competition for exhibition in NYF-2022.

5. Online Essay Writing Competitions at SKNCOA, Jobner

An essay writing competition was organized on the subject of Innovative Idea/Technologies to Reduce Food Waste at SKN College of Agriculture, Jobner under NAHEP on 16 October, 2021. In which 57 students were participated.

6. Organization of Online Quiz Exam series at SKNCOA, Jobner

A quiz series for the undergraduate college students was organized from 18th April 2022 to 09th May 2022 at NAHEP, SKNAU, Jobner. In this series total 105 students took part.

Students participation in poster competition

Winners of Elocution comptetion

Games & Sports

- Establishment of Badminton court at Girls hostel and ground for Kabaddi and Volleyball has been prepared in front of new college building at College of Agriculture, Fatehpur.
- Play ground has been developed in the college premises at College of Agriculture, Bharatpur.

Career Development Centre (CDC):

Date	Activities with resource person
26.07.2021	Online Training on "Powerful Interviewing Skills: A Key to Dreams come true" by Dr. K. Siddharth, Chief Mentor, Ensemble IAS Academy, New Delhi
31.07.2021	Training on "Impactful Interviewing Skills" by Dr. K. Siddharth, Chief Mentor, Ensemble IAS Academy
02.08.2021	Webinar on Introduce Yourself Through Powerful Headings: An art of CV Preparation By Dr. Shaizy Ahmad, Assistant Professor, Department of Social Work, Central University of Rajasthan
05.08.2021	Training cum workshop on "Email Writing workshop And Medhae CAB Program Pitching" by Urooj Wasim Khan, Medha Foundation
10.08.2021	First-round group discussion of "Youthscape- celebrating the legacy of India's milkman By Urooj Wasim Khan, Medha Foundation
10.08.2021	Second round group discussion of "Youthscape- celebrating the legacy of India's milkman" by Urooj Wasim Khan, Medha Foundation
23.08.2021	Third round of e-Youthscape- Panel Discussion on "The Relevance of Dr. Kurien's role in today's rural India."
07.09.2021	Two Students from SKN Agriculture University, Jobner, were selected for the final round. 1. Jaswant Singh Bhati S/o Sardar Singh Bhati, BSc. 4th year 2. Pradhuman Singh Rathore S/o Shri Narveer Singh Rathore, BSC, 4th year Final round of Story telling to the competition Youthscape- Celebrating India's milkman's legacy.
27-28.9.2021	Career Orientation programme at SKNCOA Jobner
23.10.2021	Career Development Centre CoA, Lalsot and CDC SKNAU Jobner organized a one-day training on 23rd Oct., 2021 on the topic entitled CAB and 21st century employability skills at COA, Lalsot
25.10.2021	Inter University selection Trial for Zonal NAAS elocution competition on "Energy and Agriculture - Challenges in 21st Century" virtually and sent the names of two winners to Hon'ble Vice-Chancellor, SKNAU, Jobner
26.10.2021	CDC, SKNAU, Jobner organized workshop on "21th Century Skills for Higher Employability of Students and the invite key speaker was Mr. Urooj Washim Khan, Area manager, Medha Foundation.
27.10.2021	Organized Zonal elocution completion of 11 Universities on "Energy and Agriculture: Challenges in 21th Century" on 27th Oct., 2021 and selected two winner candidates to participate in final national level elocution competition to be held at BHU, Varanasi (UP).

28.10.2021	CDC, SKNAU in collaboration to LHO, SBI, Jaipur organized Career orientation elocution competition on Independent India @ 75: Self Reliance with integrity" Chief guest: Honorable Vice-chancellor SKNAU, Jobner and Sh. Devendra Kumar Joshi, Chief Manager (Vigilance), SBI, Jaipur
11.11.2021	COA, Jhilai and CCS-NIAM jointly organized a webinar on "Agriculture Entrepreneurship and Value Addition" programme for students and staff.
15.11.2021	Career Development Centre, SKNAU, Jobner organized pre-placement talk followed by a presentation and a written quiz by Shri Ashish Grover, Viterra India Private Limited, Mumbai and also broadcast through Facebook live.
17.11.2021	Outreach online webinar on Agribusiness Startup Incubation Programme Jointly Organized by COA, Navgaon & Ch. Charan Singh National Institute of Agriculture Marketing (CCS NIAM), Jaipur. Career Development Centre COA, Lalsot organized online webinar on Agri-Business start-up incubation with the collaboration of CCS-NIAM, Jaipur
01.12.2021	Medha CAB pitching session at SKNCOA Jobner by Urooj Wasim Khan, Area Manager, MEDHA Learning Foundation.
02.12.2021	"Re-frame education" competition for the undergraduate and postgraduate students of Biology and related sciences in collaboration with Poornima University and SKN Agriculture University, Jobner.
04.12.2021	Organized an online meeting of all Head of Departments for starting the Group discussion and Presentation on weekly basis of M.Sc. and Ph.D. students at their department level.
10.12.2021	Organized a Placement Talk and coordinated placement of B. Sc. Final, B.Sc. Pass out, M. Sc. and Ph. D. students by Sh. R.S. Pandey, Regional Sales Manager and Sh. Yougendra Singh Rathore, Assistant Manager (Agronomy), Corteva Agriscience, Jaipur
15.12.2021	Career Development Centre, SKNAU, Jobner and MEDHA organized a one-day workshop on interview prepration and CAB pitching at SKNCOA, Jobner.
03 January to 13 Feb.,2022	Started the Career Advancement Bootcamp (CAB) programme-2021-22 in coordination with Medha Learning Foundation (23 students were enrolled)
06.01.2022	Online Lecture On "Advanced statistical techniques in agricultural research" By Dr. B.V.S. Sisodia, NAAS Fellow, Ex- Prof. & Head, Deptt. of Agril. Statistics, ANDUAT, Ayodhya, U.P.
11.01.2022	Online placement by Rajasthan Grameen Ajeevika Vikash Parishad (RGAVP), Udhyog Bhawan, C-scheme, Jaipur on 11 January, 2022 online biodata collection of M.Sc. pass out students and submitted to Rajasthan Grameen Ajeevika Vikash Parishad (RGAVP).
24.01.2022	Ons day online workshop on "Cancer prevention and life style" organized by CDC, SKNAU, Jobner in collaboration of Sanjeevani-life Beyond Cancer, Jaipur by Dr. Naina Kumari Agrawal, Cancer Specialist, SMS Hospital, Jaipur and Dr. Harsita Verma, Programme Coordinator, Sanjeevani-life Beyond Cancer, Jaipur
27.01.2022	One day webinar on Financial Literacy awareness programme organized by CDC, SKNAU, Jobner in collaboration of Udyam Expert, Directorate of Agriculture Extension, Jaipur

11 Feb. to 30 March,2022	Started a online Career Advancement Bootcamp (CAB) programme-2021-22 CDC, SKNAU, Jobner in coordination with Medha Learning Foundation, (SKNCOA, Jobner, COA, Lalsot and COA, Fatehpur-Shekhawati, Sikar students attended)
15.02.2022	CDC, SKNAU Jobner and MEDHA jointely organized workshop on CAB Programme Pitching SKNCABM, Jobner and SKCOA, Jobner for UG students.
02 March to 12 April,2022	Started the Career Advancement Bootcamp (CAB) programme-2021-22 in coordination with Medha Learning Foundation (27 students were enrolled)
02 March to 12 April,2022	Started the Career Advancement Bootcamp (CAB) programme-2021-22 in coordination with Medha Learning Foundation (20 students were enrolled)
26.03.2022	A campus interview organized by Advanta Seeds (a part of UPL), UPL Limited, Hyderabad organized at SKN College of Agriculture, Jobner.
28.04.2022	Distribution of Certificate to the CAB participants and also appreciated the all CDC member of SKNAU, Jobner

Facilities updated during the reporting year

Meeting hall at SKNAU, Jobner: In the administrative block of SKN Agriculture University, Jobner conference hall is furnished with round table and executive chairs and equipped with LED panel, interactive podium and audio-visual aids.

SKNCOA, Jobner

Virtual Classroom: Nine class rooms in the SKN College of Agriculture, Jobner were upgraded into virtual class rooms under IDP- NAHEP project. These virtual class rooms are equipped with latest technologies like LED Interactive panel, internet facilities, interactive podium, audio-visual system etc., which are being utilized by the faculties for teaching and other interactive discussion sessions with students.

Sports Facilities: The sports infrastructure has been strengthened in the SKN College of Agriculture, Jobner by buildup cutting-edge world-class sports facilities. The infrastructure created for the students through World Bank funded project IDP-NAHEP includes: Playground, Volleyball court, Basketball Court and Badminton Court, which all qualify for the international standards. These facilities has been developed for looking the importance of extra-curriculum and multidimensional growth of the students.

Renovation of Laboratories: Total 16 laboratories were renovated in the civil work carried out under NAHEP. The renovation work included the installation of floor tiles, construction of laboratory platforms, installation of fortified tiles on the platforms, installation of aluminum partition and doors, installation of false ceiling, curtains, repair and installation of electrical connections, installation of exhaust fans, repair and installation of sanitary connections, wash basins, distemper painting of laboratories etc. The laboratories were renovated in the department of Livestock Production Management, Statistics, Mathematics and Computer Science, Agricultural Engineering, Biochemistry, Plant Breeding and Genetics, Agronomy, Soil Science, Plant Pathology and Extension Education.

SKNCABM, Jobner:

The computer room and meeting hall has been strengthened at SKN College of Agribusiness and Management, Jobner.

COA, Lalsot:

Three class rooms in the College of Agriculture, Lalsot were upgraded into virtual class rooms under IDP-NAHEP project. These virtual class rooms are equipped with latest technologies like LED Interactive panel,

internet facilities, interactive podium, audio-visual system etc. which are being utilized by the faculties for teaching and other interactive discussion sessions with students.

The laboratories have been strengthened by the instruments and equipments i.e. KelPlus Fully automatic Nitrogen Analyzer, weighing balance etc. The Vermicompost unit, Azolla unit and Mushroom unit are developed as experiential learning units. The CCTV Camera Surveillance System has been installed in the campus. Fruit orchards of Bael, Guava are established at college farm along with drip irrigation system in one hectare area. One shade net house in area of 480 sq. mt. is constructed and utilized for raising of fruit plants, flowers and vegetable crop seedlings. A water harvesting pond of capacity of 1.20 crore litre water has been constructed to store the rain water. The college boundary and retaining wall has been constructed. The meteorological observatory is installed in the campus. The ceremonial platform, residential quarters, overhead water tank, farm store, parking shade and main link road of the college and new college gate has been constructed. The seminar room and Deans office has been upgraded with wall paneling and false ceiling. The hostels were renovated and repaired.

COA, Fatehpur:

The college has been shifted in the newly constructed administrative block of new college building in the month of September, 2021. The girls hostel and dean's residence was inaugurated by Hon'ble Chief Minister Sh. Ashok Gehlot Ji during the Agri Expo-2022 at Jobner. The CCTV surveillance system has been installed in the college building and girls' hostel. The conference room was furnished and equipped with AV aids, round table and chairs, LED etc. Interactive panels have been installed in classrooms of new college building to develop as smart class rooms. Laboratory of Agricultural Entomology, Plant Pathology, Soil Science, Plant Breeding and Horticulture have been strengthened in the view to pursue ICAR accreditation. Deep freezer, Seed germinator, Laminar Air flow, BOD, autoclave microscope, weighing balance, insect stretching box refrigerator, tissue culture racks, seed germinator cum plant growth chamber, centrifuge machine, spectrophotometer, flame photometer etc has been installed in the laboratories.

COA, Navgaon:

The class rooms are converted into smart class rooms with the installation of interactive board with camera. All classrooms are connected to non-stop electricity service by installing 3.5 kW inverter. The college has been connected with Broad Band BSNL Wi-Fi connection. Water cooler, LCD projectors, photocopier machine and tractor 50 HP has been purchased. The volley ball playground has been developed for students.

COA, Kotputli:

One smart class room has been developed in the college. One tractor was purchased to carry out the farm operations.

COA, Basedi:

One class room is converted into the smart class room by equipped with interactive panel. The solar panel with invertor has been fitted to uninterrupt electric supply in the campus. Reverse Osmosis filter system of water has been installed for student's drinking water. Farm has been strengthened by the adding of implements and Machinery like tractor, ploughing equipment's, trolley, and water lifting pump.

Library and Learning resources

The University central library was started in 2013 with existing college library building in Jobner. The primary mission of the central library is to provide adequate support for teaching, research and extension programs by maximizing digital information resources to teacher's, scientists, students, researchers, farmers, trainees, agricultural officers and other users of different units of SKNAU. The vision of university central Library is to make Digital Resource Learning Center for all constituent's colleges, Institute and other units of the university.

The objectives behind university central library is to create a digital learning environment adhering with teaching, research and extension programs of the university along with comprehensive collections of conventional documents and digital learning environment which includes ,modern ICT infrastructure facilities well equipped with RFID system, CCTV, UPS, AC, Xerox Machine, Dehumidifiers, Printers and Computers providing Internet Surfing with 24x7 hours high speed Wi-Fi Internet Laptop zone facility in the library, campus & hostels. Online Public Access Catalog (Webopac, CeRa online Journals, online theses, lifetime e- books access and Digital database services.

Available books, periodicals etc.

S. No.	Particulars	Available nos. (as on 30.06.2021)	Purchase after 01.07.2021(nos)	Total no.
1	Books	53345	05	53350
2	E-Books	51	53	104
3	Print Journals	34	-	34

University library has highly specialized collections of 52333 books in Agriculture and Allied Sciences which includes Books, Thesis, Bound Journals, Government Publications, Book Bank Text books and CD-ROMs. etc. Central Library subscribes 34 Indian print journals, 10 Newspapers and 16 Magazines also. In addition to this, 24x7 hours online access facility of e-Books (51 lifetime access), e-journals (CeRA access) and ICAR e-journals are also available in campus.

Digitation of library

A Computerized Book Bank facility is totally open to all students and staff of this college for their selection,issue along with consultations of reading materials. An open access system has been adopted for consultation and selection of books. In this scheme book are issued to all SC/ST students free of charge and all other general category of students are given text books on rental basis (Rs 10 per books). The books are issued for complete one semester through single window system i.e. RFID KIOSK system. More than 15000 UG/PG collections of text books are available to all students. The books are issued to student with 10 books from book bank and four books from library.

New Facilities developed

Separate Reading room (VACHNALAY) has been provided in the library to enhance better reading facility to students with provision of Internet Surfing with 24x7 hours high speed Wi-Fi Internet Laptop zone facilities.

Additional required number of furniture's / fixtures have been provided to constituent's colleges of university which includes -SKNCOA, Jobner, COA, Bharatpur, COA, Fatehpur etc. and surplus number of purchased text books and other desired books have been provided through inter library loan services (on loan basis) to constituent colleges of SKNAU, Jobner. 53 e-books have been added being purchased & provided by NAHEP, SKNAU, Jobner.

Library automation service

The library is fully computerized with KOHA - RFID SYSTEM under library automation services. More than 52333 books collections of libraries have been tagged with Radio Chips for computerized checkout / check in services on RFID KIOSK. KOHA (library software) online catalogue (webopac) facilities have also been provided to all users. It includes an about 50000 books consisting books, thesis, journals, and other textbooks etc.

More than 50000 catalogue records of university library have been digitized and uploaded on koha Webopac (http://14.139.51.40/). More than 2400 digitized materials (including Theses, Reports/ Question Paper / Manual/ Research Papers etc.) have been uploaded on ICAR- Krishikosh Portal (under Intuitional Repositories) (https://krishikosh.egranth.ac.in/handle/1/84614). Free / Open Access e- Journals (ICAR) is also available to all constituent colleges of SKNAU, Jobner through web link (http://epubs.icar.org.in/ejournal/).

The other leading online central library resource services of university can access through web page http://www.sknau.ac.in/en/student/resources/central-library).

Online e-resources / CERA access facilities:

SNo.	Online E Resources Services /CeRa Access	Web link/IP address / Library resource links http://www.sknau.ac.in/en/student/resources/central-library
1	J Gate Journals (ICAR)	http://jgateplus.com/search/
2	SKNAU - Krishikosh (ICAR)	http://krishikosh.egranth.ac.in/handle/1/84614
3	KohaOpac online Library (SKNAU)	http://14.139.51.40/
4	Life time e-Books access	(51+53=104 e-Books) https://www.asapglobe.com/Search.aspx?q=PurchasedBooks&type=keyword www.sknau.ac.in/Content/pdf/List%20of%20Accessible%20titles%20-%20SKN%20Agricultural%20University.pdf
5	India agristat database	http://www.indiastatagri.com/
6	ICAR open access e journals	http://epubs.icar.org.in/ejournal/
7	MOPAC	**Download KOHA Access MOPAC Android App**

Organization of Webinars

The webinars provide an online platform for interaction among intellectual and academicians. The University is fully utilizing the digital technology and organized following webinars in the month of July under the aegis of ICAR World Bank funded project NAHEP. Eminent speakers delivered lecture on contemporary issues for transcending the knowledge of faculty and educating the students.

- National webinar on “Fuel Conservation Measures in Agriculture and Allied Government Schemes” was organized by Directorate of Extension Education, SKNAU, Jobner & IDP- NAHEP SKNAU, Jobner on 06.07.2021 and 344 participants attended it.
- A National webinar on Seed Production and Legislation was organized on 07.07.2021 by IDP-NAHEP, SKNAU, Jobner and 268 participants attended it.
- IDP-NAHEP, SKNAU, Jobner and College of Agriculture, Bharatpur organized online webinar on “Protected Cultivation- Research and Challenges in India” on 08.07.2021 and 158 participants attended it.

Students of SKNCOA,Jobner in Enterpreneurship programme in animal production

Girls Students participation in menstrual hygiene awareness programme

- Organized a webinar on "Remote Sensing Innovations for Smart and Precision Agriculture" on 12.07.2021 and 1140 participants joined from various countries like Russia, Pakistan, China, UK, Vietnam, Fiji and Bangladesh.
- Online national webinar on “Heat Wave: Impact on Agriculture” was held on 22.07.2021 organized by Directorate of Research, SKNAU, Jobner.
- Online national webinar on Health Foods, Claims and Consumer Behaviors was organized by IDP-NAHEP, SKNAU, Jobner and Department of Biochemistry, SKN College of Agriculture, Jobner on 24 July, 2021 and 165 participants attended the webinar.
- Online webinar on “Discussion regarding mechanization of the farms of the University” was held on 26.07.2021 organized by Directorate of Extension Education, SKNAU, Jobner & IDP- NAHEP SKNAU, Jobner.
- A online webinar on “Research and Challenges of Honey Bees and Pollinators in India, organized jointly by College of Agriculture, Kumher, Bharatpur & IDP-NAHEP, SKN Agriculture University, Jobner on 27.07.2021 and 200 participants attended it.
- Online webinar on “Powerful Interviewing Skills: A Key to Dreams Come True” was held on 31.07.2021 organized by IDP-NAHEP, SKNAU, Jobner.
- Online Guest Lecture on Efficient Financial Management was organized on 03.08.2021 by IDP-NAHEP, SKNAU, Jobner and 58 participants attended it.
- College of Agriculture, Kumher, Bharatpur organized online motivational lecture “Belief in your-self” under on 11.08.2021. The lead speaker of the motivation lecture was Mr. Devendra Kumar Bishnoi (IPS), Superintendent of police, Bharatpur, Rajasthan.
- Orientation programme “Startups in Agri-Exports” was organized by IDP-NAHEP, SKNAU, Jobner on 01.09.2021 and 430 participants attended it.
- National webinar on ‘Teachers Shape Young Minds and Inspire them to be Leaders of Tomorrow’ was organized by IDP-NAHEP, SKNAU, Jobner on 20.09.2021 and 108 participants attended it.
- IDP-NAHEP, SKNAU, Jobner organized a lecture on Career opportunities with Agriculture Education on 20.10.2021.
- IDP-NAHEP, SKNAU, Jobner organized online guest lecture on Strength Identification Fundamental Building Blocks for Exam Preparation and Time Management on 23.10.2021.
- A webinar on Agri-Startup and Agri- entrepreneurship was organized by COA, Fatehpur on 10 November, 2021 and 60 participants attended it.
- A webinar on Agriculture entrepreneurship & Value addition was organized by COA, Jhilai on 11 November, 2021 and 50 participants attended it.

Webinar on Honey Bees and Pollinators in India

Webinar

Webinar

Visit of Dr. R. C. Agarwal, ND NAHEP at NAHEP

Enterpreneual course of READY students at NAHEP

Awareness Compaigns

- As an environmental safeguard component of IDP-NAHEP, SKNAU organized green campus campaign "We Love Mother Nature" in September, 2021. Under this campaign plantation programme, Slogans/Logo/Mascot/Short Video competition were conducted from 03rd-09th September, 2021 in which total 62 UG Students participated.
- Considering the importance of mental health in everyday routine an awareness programme on Yoga & meditation for stress management and healthy mind was organized through IDP-NAHEP, SKNAU on 1st October, 2021.
- To make people conscious about emergency preparedness during fire breakout standard operating procedure (SOP) was narrated by the experts on 12nd October, 2021 at SKNCOA, Jobner, keeping in cognizance of life and property.
- IDP-NAHEP, SKNAU celebrated International World Food Day on 16th October, 2021 through organizing lecture and essay writing competitions to promote awareness and action for those who suffer from hunger and for the need to ensure healthy diets for all.
- An awareness event for the agriculture students on Career Opportunities with Agriculture Education was organized by IDP-NAHEP on 20th October, 2021. Students were informed about the vast scope of agriculture in central (ICAR), state and local level government jobs and enterpreneual opportunities at private sector.
- Composting of Biodegradable Agricultural Waste and Utilization of Compost in Forage Crops: The SKN College of Agriculture, Jobner organized demonstration programme entitled "Composting of Biodegradable Agricultural Waste and Utilization of Compost in Forage Crops" on 27th November, 2021 at SKN Collage of Agriculture, Jobner. The Programme was graced by the Chief Guest Prof. J. S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner. The programme was presided over by Prof. A. K. Gupta, Dean and Faculty Chairman, SKN Collage of Agriculture, Jobner. Students, faculty members and journalist were present during the programme. Total 300 participants were present during the demonstration programme.

Demonstration Programmeon Composting of Biodegradable waste

- Awareness Programme on E-Waste Management organized by IDP-NAHEP in collaboration of extension department from 22nd to 30th December,2021. During this programme conducted several events for undergraduates students i.e. poster and slogan competitions, guest lecture, awareness rally and e-waste collection.
- An Awareness Programme on Menstrual Hygiene and Waste Disposal Management was organized for the girl students of SKNCOA, Jobner on 7th January, 2022 under IDP-NAHEP. A demonstration of newly purchased sanitary napkin vending and disposing machine was also arranged in this event.
- Bio gas plant generated slurry application:The Department of Soil Science and Agricultural Chemistry, SKN College of Agriculture, Jobner conducted a demonstration programme entitled "Bio gas plant generated slurry application" on 23.02.2022 at biodiversity park, SKNAU, Jobner. The demonstration programme was held under Agricultural waste management, READY programme. All the research scholars and faculty of the department and Experience Learning Unit students were present.

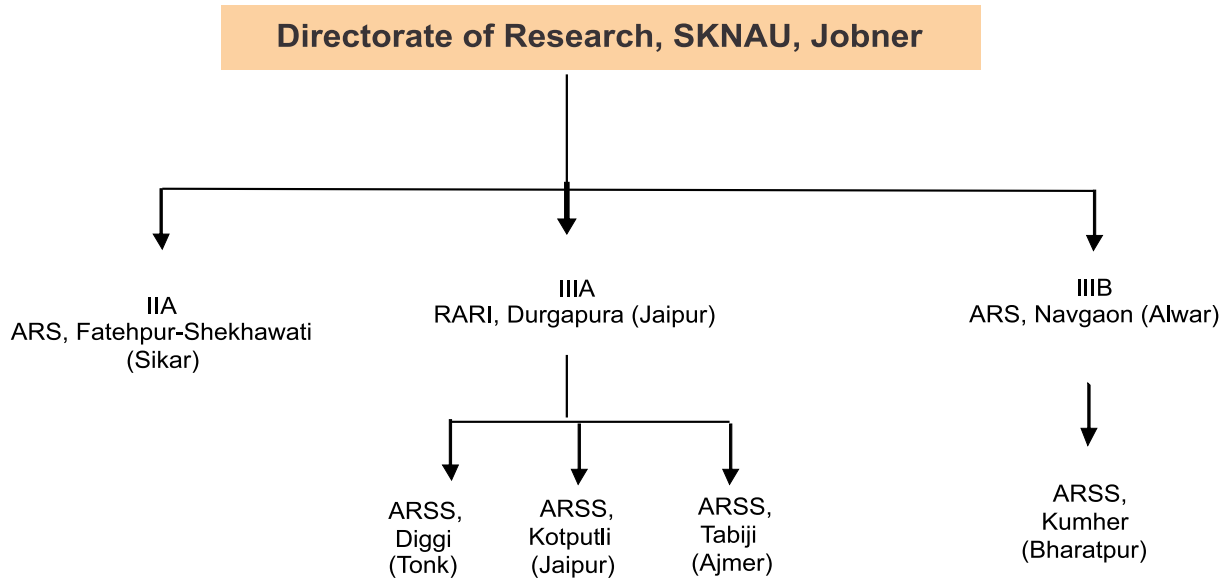
4. RESEARCH ACTIVITIES

SKN Agriculture University, Jobner is diversifying and strengthening its infrastructure to boost the research activities and contribute in knowledge creation, development of the agricultural sector where the immediate beneficiaries are the farmers. The varieties developed by the University has brought several fold increase in the production and productivity of the major crops of the state and also adjoining districts of the neighbor states.

Directorate of Research was established in November, 2013. There are seven research stations encompassing three agro-climatic zones under the administrative control of Directorate of Research, SKNAU, Jobner. These include Rajasthan Agricultural Research Institute (RARI) at Durgapura, Jaipur, two Agricultural Research Stations located at Navgaon (Alwar) and Fatehpur-Shekhawati (Sikar) and four Agricultural Research Sub-Stations at Tabiji (Ajmer), Kumher (Bharatpur), Gonera - Kotputli (Jaipur) and Diggi (Tonk).

The major crops of the state, viz, wheat, barley, pearl millet, chickpea, mungbean, moth bean, cowpea, groundnut, cluster bean, mustard, taramira, seed spices and majority of vegetable crops are grown in the regions under jurisdiction of the university. Thus, the three agro climatic zones under the jurisdiction of the university have potential to address the needs of the state with respect to food crops, vegetables and seed spices.

Directorate of Research is the nodal set up of the University for executing the research schemes financially supported by ICAR/ DAC/ State Govt. and other external agencies. The focus of the Directorate is on developing research strategies to develop economically viable and ecologically sustainable crop production technologies and varieties which can be conveniently adopted by the farmers. Our priority is to develop climate resilient varieties of various crops so as to cope up with the climate change. The long term research goals and objectives of the university are to develop cost effective technology, high yielding varieties along with addressing the conservation of natural resources of soil, water and vegetation by researches conducted at different locations under different agro-climatic conditions. The SKNAU research system also undertakes seed production programmes for facilitating availability of improved seeds to the farmers in the state. Maintaining effective linkage with line departments of GOR and providing relevant knowledge and technical information for policy issues related to agriculture development is important objectives of the university research system. Development of improved varieties and technologies by the university has opportunity of crossing the state boundaries and serving the farmers of other states as well. Units of Directorate of Research (DOR) which fall under three agro-climatic zones covering eight districts are shown in the following flowchart:



Lead and verification functions of the three research stations for their respective ago-climatic zone are as follow:

I. RARI, Jaipur (Zone IIIA): Rajasthan Agricultural Research Institute (RARI), Jaipur is a major constituent research station of the university, equipped with sophisticated instruments and other research facilities.

a. **Lead functions:** Development of varieties and technologies for yield maximization in irrigated wheat, barley and irrigated/rainfed chickpea, lentil, pea, green gram, cowpea, pearl millet, groundnut, cluster bean and vegetables etc.

b. **Verification functions:** Besides the above enumerated lead functions, the institute is actively engaged in the verification functions of irrigated mustard, pigeon pea, management of salt affected soils and water, *in-situ* moisture conservation, testing and modification of farm implements, water management, forage crops and integrated pest management.

II. ARS, Navgaon (Alwar) Zone IIIB

a. **Lead functions:** Development of varieties and technologies for rapeseed-mustard (irrigated and rainfed), reclamation and management of problematic soils, crop cultivation with mineralized water.

b. **Verification functions:** Pearl millet, pigeonpea, barley, wheat, clusterbean, chickpea, field pea, *in-situ* moisture conservation, testing and modification of farm implements.

III. ARS, Fatehpur- Shekhawati (Sikar) Zone IIA

a. **Lead functions:** Development and management of Agro-forestry and other farming systems and in-situ moisture conservation.

b. **Verification functions:** Chickpea, mustard, pearl millet, fenugreek, fennel, mungbean, cowpea, sesame, sprinkler irrigation, forage crops, management of salt affected soils and water conservation.

Farm/Instructional area

The university has sufficient farm area for research as well as for seed production. During the reporting period most of the research farms are in the process of strengthening infrastructure facilities and increased mechanization of farm. Details of research farms are given in the following table:

Farm/units	Total area (ha)	Under cultivation (ha)	Under research (ha)
RARI, Durgapura	45.00	28.00	12.00
ARS, Fatehpur	150.00	90.00	10.00
ARS, Navgaon	47.00	35.00	06.00
ARSS Diggi	50.00	44.00	01.00
ARSS, Kotputli	35.00	28.00	02.00
ARSS Tabiji	18.50	14.00	01.50
ARSS, Kumher	60.00	53.35	02.00
Kherwari Farm	11.9	8.5	-
Padasoli Farm	220	100	-

Research projects

A total of 17 AICRP/ANIP projects are running at various research stations of the university. The salient achievements during 2021-22 under these projects has been mentioned here under :

1. AICRP on Vegetables Research, RARI, Durgapura, Jaipur (Year 1970)

- Under this project, a total 89 experimental trials were conducted which includes of 39 trial of varietal evaluation, 27 trials of hybrid evaluation, 4 trials of vegetable production technology, 9 trials of evaluation for biotic and abiotic stresses and 10 were disease management trials.
- Under the Tribal Sub Plan (TSP) 3 training programme at Pomegranate Excellence Centre, Dindhol (62 farmers), COA, Jhilai, Tonk (65 farmers), and COA, Lalsot, Dausa (77 farmers) were organized.
- IDM package of growing of two rows of Maize as border crops, use of agri Silver mulch sheet, seed treatment with Carbendazim 12%+ Mancozeb 63% WP @3g/kg and drenching of Captan 70%+ Hexaconazole 5% WP @ 0.1% at 15 days after germination followed by spraying of tebuconazole 50%+Trifloxystrobin 25% @ 1g/L; spray with Imidacloprid 17.8% SL @7.5ml/15 L+Neem oil 0.2%) followed by spraying of Fosetyl-AL @ 0.1% and Tebuconazole 50%+Trifloxystrobin 25% WG @ 1g/L; spray with Imidacloprid 17.8 SL @ 7.5ml/15 l + Neem oil 0.2%; followed by Fosetyl-AL @ 0.1% at 10 days interval on bottle gourd cv. Pusa Naveen has recorded least percent disease index of Alternaria leaf blight (10.92), Cercospora leaf spot (12.43), downy mildew (11.84) and viral mosaic (14.83) with highest yield of 348.5 q/ha and CB ratio of 1:3.5.
- Highest yield of coriander leaves (94.03 q/h) in coriander and root yield (237.61 q/ha) in radish with net income (Rs.2,55,100 /ha) and B:C ratio (4.0) with the application of recommended FYM + Fertilizer + Plant Protections with organic method + IIHR microbial consortium @12.5 kg/ha recommended under vegetable production technology.

2. AICRP on Wheat and Barley, RARI, Durgapura, Jaipur (Year 1971)

- Under this project, forty best genotypes of wheat and 50 genotypes of barley were evaluated in station trials during this year.
- Eleven best performing genotypes of wheat namely; Raj-4565, Raj-4566, Raj-4567, Raj-4568, Raj-4569, Raj-4570, Raj-4571, Raj-4572, Raj-4573, Raj-4574 and Raj-4575 and twelve best genotypes of barley namely RD-3047, RD-3048, RD-3049, RD-3050, RD-3051, RD-3052, RD-3053, RD-3054, RD-3055, RD-3056, RD-3057 and RD-3058 were contribute in different coordinated trials for evaluation at national level in different climatic zones.
- Wheat variety Raj-4565 from IVT to AVT-1 in Salinity/Alkalinity conditions and barley variety RD-3034 from IVT to AVT-1 in Feed Barley trial and four entries namely, RD-3059, 3060, 3061 and 3062 from IVT to AVT-1 in Salinity/Alkalinity conditions were promoted
- Basic seed of four varieties of wheat viz. Raj- 4079 (440 kg.), Raj-4037(540 kg.), Raj- 4120 (650 kg.) and Raj-4238 (830 kg.) and five varieties of barley viz. RD-2035 (400 kg.), RD-2794 (500 kg.), RD-2899 (400 kg.) RD-2715 (30 kg.) and RD-2899 (30 kg.) were produced.
- Under this project 154 germplasm lines of wheat, 450 germplasm lines of barley and 5041 segregating lines of wheat and 1600 segregating lines of barley of different generations from F1 to F7 and bulks were evaluated for yield contributing traits and for disease resistance.
- During this period, 208 fresh crosses of wheat and 158 in barley were made using different parents.

3. AICRP on Pearl Millet, RARI, Durgapura, Jaipur (Year 1976)

- Under the testing Programmes, Seven Coordinated, Two Station, Five ICAR-ICRISAT Cooperative & Five Harvest-Plus Trials (in all total Nineteen trials) of plant breeding, six trials of Agronomy, ten trials of Plant Pathology, six trials of Entomology and four trials of Plant Physiology were conducted.

- Hybrid RHB-228 have been notified for cultivation in state of Rajasthan in 87th meeting of Central Sub-Committee on Crop Standards, Notification and Release of Varieties for Agricultural Crops held on 18th October, 2021.
- PE application of Atrazine @ 500 g a.i./ha followed by POE application of Tembotrione 42% SC @ 100g *a.i.*/ha at 3-4 leaf stage with maximum net returns and B:C ratio recommended for control of weeds in pearl millet under rainfed condition.
- Application of 100 % RDN through FYM (about 12-15 ton/ha.) + Biomix (2.0 l/ha.) with maximum net returns and B:C ratio when applied in soil two weeks before sowing recommended for increasing pearl millet productivity under rainfed condition.
- One entry RHB-271(ICMA 843-22 X RIB-20103) contributed in IHT-E, RHB-272 (ICMA 04999 x RIB 20101) in Initial Hybrid Trial- (M), three entries viz., RHB 173, RHB 177 & Raj 171 in Released Hybrid and Varietal trial and ten entries *viz.*, RIB-19721, RIB-19745, RIB–19765, RIB-19769, RIB- 19799, RIB-19815, RIB-19841, RIB- 19859, RIB-19867, RIB-19881in Elite Inbred Joint Bio fortification Trial.
- In the Rajasthan Bajra Hybrid Trial-I and II, one hundred new hybrids have been evaluated. Best entries having high grain yield and early flowering will be further evaluated in the Advance Station Trial in the coming Kharif, season.
- Two set of Line x Tester, using twenty five restorer line and four male sterile lines were made and F1 of ten Maintainer line and ten restorer line were planted and F2 will be evaluated in coming Kharif season.
- In the Harvest-Plus Project Trial (ICRISAT Project), six entries were selected from early hybrid trial, seven from B line parental trial and four from R line parental trial.
- 20 restorer lines of released hybrids and 96 established R lines were planted in 576 rows and were maintained by selfing and Sibbing.

4. AICRP on Seed Spices, SKN College of Agriculture, Jobner (Year 1979)

- Two varieties i.e fenugreek RMt-354 and fennel RF-290 were approved for gazette notification and release at national level through central sub-committee of crop standards, notification and release of varieties of horticulture crops held virtually on 23.03.2022.
- One Fennel variety RF-289 (Karan Sonf 1) was identify and release in XXXII Annual Group Meeting of AICRPs on Spices held during 22-24 Sept., 2021.

Name of the Variety	Salient Feature of the Variety
Fenugreek: RMt-354	
Year of identification & release Notification no.	Proceedings: XXVI workshop of AICRP on Spices, 5th – 7th Oct. 2015 Awaited
Production condition	Average: 1537 kg/ha
	Potential: 2444 kg/ha
Recommended area	All the fenugreek growing areas of the country under irrigated condition.

Fenugreek : RMt-354

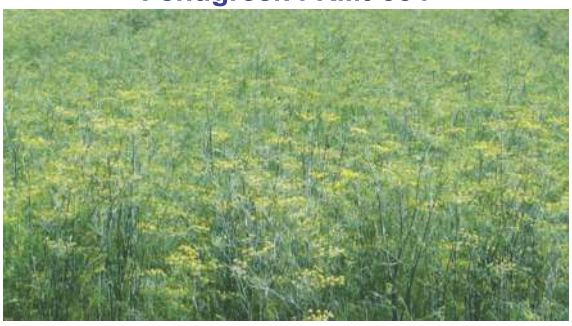
Special features	1. Plant Height: 98.01 cm (Range 77.87-112.7cm) 2. Maturity period: 130-140 days 3. Seed rate: 20-25 Kg/ha. 4. Plant morphology: • Plants medium tall • More branches & pods per plant • More seeds per pod • Bold and attractive yellow coloured seed. • 1000-seed weight: 13.71 g

Fenugreek : RMt-354


Fenugreek : RMt-354

Fennel: RF-290

Year of identification & release	Proceedings: XXX Workshop of AICRP on Spices, 14-16 Nov., 2019
Notification no.	Awaited
Production condition	Average: 2065 kg/ha Potential: 4866 kg/ha
Recommended area	All the fennel growing areas of the India viz. state of Rajasthan, Gujarat, U.P., Haryana and Bihar under irrigated normal sowing conditions of rabi season
Special features	1. Plant Height: 145.60 cm (Range 121.0 - 185.0 cm) 2. Maturity period: 140-150 days 3. Seed rate: 10-12 Kg/ha. 4. Plant morphology: • Erect and medium tall plants • Long, attractive and bold seeds • 1000-seed weight: 8.81 g


Fennel : RF-290


Fennel : RF-290

Fennel: RF-289

Year of identification & release	Proceedings: XXXII Annual Group Meeting of AICRPs on Spices held during 22-24 Sept., 2021
Notification no.	------
Production condition	Average: 1743 kg/ha


Fennel : RF-290

	Potential: 3115 kg/ha
Recommended area	All the fennel growing areas of the India viz. state of Rajasthan, Gujarat, U.P., Haryana, M. P. andBihar.
Special features	1. Plant Height: 140 cm (Range 134.0– 150.0 cm) 2. Maturity period: 140-150 days 3. Seed rate: 10-12 Kg/ha. 4. Plant morphology: • Erect and medium tall plants • More umbels per plant • Bold and attractive seeds • 1000-seed weight: 7.23 g

Fennel : RF-289

- Coriander entry UD-808 stood second in performance at national level while first in the state that may be released for the state after testing at ATCs.
- Three entries of cumin *viz.* UC-350, UC-257 and UC-250, two entries of fennel *viz.* UF-231 and UF-230, two entries of fenugreek *viz.* UM-259 and UM-233 and one entry of coriander *viz.* UD-565 contributed in CVT trials.
- Out of 2000 germplasm lines of four seed spice crops, 224 accessions of coriander, 240 accessions of cumin, 348 accessions of fenugreek and 57 inbred lines of fennel were evaluated.
- For the purpose of collection of germplasm and survey for diseases in cumin visited western Rajasthan twice in the season (February & March 2022) and collected more than 200 germplasm lines of cumin from the farmer fields.
- Mutation breeding programme was started in fenugreek and cumin.
- Crosses were attempted in Rmt-1 x Rmt-305 to transfer determinate growth habit in a good agronomic base.

5. AICRP on Groundnut, RARI, Durgapura, Jaipur (Year 1980)

- RG 638 recommended for identification and it may be identified in upcoming workshop of oilseed crops.
- Under this project, 17 coordinated trials (11 breeding and 06 agronomical trials), 02 station trials (SRT & RST) and 03 ICRISAT trials were conducted during this year.
- During 2021-22 in this project, 34 crosses wee made, 127 single plants were selected from F1 to F7 generations and 16 lines were bulked.
- 116 working germplasm were maintained this year.
- Total 05 entries namely RG 648, RG 650 and RG 575-1in IVT–I (Virginia), RG 622-5 in LSVT-I (Virginia) and ICGV 181004in HOVT-I (Virginia) were contributed in coordinated trials.

- The basic seed of variety RG 382 (30 kg), RG 425 (50 kg), RG 510 (300 kg), RG 578 (300 kg) and RG 559-3 (600 kg) was produced for further multiplication of breeder seed. The sufficient quantity of breeder seed of variety RG 510, RG 578 and RG 559-3 were produced by 78.80, 78.80 and 101.70 q against the allocation of nil, 60.00 and 91.50 q, respectively.

6. AICRP on Seed Technology Research, RARI, Durgapura, Jaipur (Year 1981)

- A total 17 experiments (Seed Production & Certification - 04 trials, Seed Pathology – 09 trials and Seed Entomology – 04 trials) were conducted.
- Field monitoring and collection of samples were also conducted for identification of new seed borne diseases and study of seed health status of farmer's saved seeds from farmer's field in soybean (102 samples), groundnut (159 samples), chickpea (295 samples) and wheat (422 samples) from different areas of Rajasthan (Jaipur, Dausa, Kota, Udaipur, Sikar, Bikaner, Jodhpur districts).
- Seed dressing with Trichoderma viride @ 10 gm/ kg seed followed by 2 foliar sprays of tebuconazole or difenconazole @0.1 % after disease initiation at 10-15 days interval was found to give maximum seed germination and field emergence, minimum percent disease incidence (PDI), and maximum seed yield of onion and both these treatments were at par with each other. Based on BC ratio Tebuconazole is cheaper in comparison to Difenconazole and can be recommended to farmers.

7. AINRP on Pesticide Residue, RARI, Durgapura, Jaipur (Year 1984)

- Residues of the Betacyfluthrin 90 g/L were recorded at below limit of quantification (<0.01 mg kg-1) on 0, 3rd, 7th, 14th and 21th days at lower dose (X) 500 ml formulation ha^{-1} and higher dose (1.25X) 625 ml formulation ha-^{1} in immature cob (Kernel plus cob with husk removed). While on 3rd days the residues of the Betacyfluthrin were recorded below limit of quantification (<0.01 mg kg-1) at lower dose and 0.0496 ppm residues were recorded at higher dose. The residue levels were at below limit of quantification (<0.01 mg kg-1) for Betacyfluthrin and Imidacloprid in mature grains, stover and soil samples collected at harvest of the maize crop.
- Residue of Imidacloprid (17.8 SL) in pea pod and soil, the initial deposit of Imidacloprid (17.8 SL) in pea pods was 1.463 mg kg^{-1}. The pesticide persisted upto 5rd day after treatment and reached below detectable level (BDL) on 7th day DAT in pea pod.
- NABL accreditation of the Pesticide Residue laboratory is completed up to 2024

8. AICRP on Agro-forestry, ARS, Fatehpur (Year 1984)

- Under this project 8 new experiments were framed and conducted on different tree species have importance in arid ecosystem viz., *Ailanthus excelsa, Prosopis cineraria, Tecomella undulata* and *Capparis decidua* alongwith 14 old experiments on different agroforestry systems *viz.*, Agri-silviculture, Silvi-pasture, Block plantation, Carbon Sequestrations potential and Germplasm collection and evaluation. Based on above experiments three recommendations added to PoP of zone II A in year 2021-22 :
    - **Growth performance of *Hardwickia binata* in block plantation:** Under rainfed condition highest volume 0.37m^3/tree and 146.51 m^3/ha recorded at density of 400 tree/ha after 33 years of growth. Thus, it recommended for plantation of this tree species at above density for receiving optimum growth and volume under rainfed condition.

- **Intercropping of rainfed kharif crops varieties in *Hardwickia binata* based agri-silviculture system:** In rainfed condition after 15 years old *H. binata* based agri-silviculture system yield was observed low (10-32%) in comparison to sole cropping system in all the Kharif crops without pruned tree condition. Thus, it recommended that under this system at 5x5 m spacing intercropping was taken only upto 15 years.
- **Intercropping of rainfed kharif crops varieties in *Prosopis cineraria* based agri-silviculture system:** Under rainfed condition 33 years old *P. cineraria* based agri-silviculture system yield was recorded higher in all the Kharif crops in comparison to sole cropping system and highest increased observed in Cluster bean (23%) followed by Pearl millet (21 %) and Cowpea (21%). Thus, it is recommended that intercropping of above kharif crops is beneficial in Khejri based agri-silviculture system in rainfed condition.

- For ex-situ conservation and evaluation purpose biodiversity park established at station and about 45 different tree species, shrubs and herbs conserved in park.

9. AICRP on Arid Zone Fruits, SKNCOA, Jobner (Year 1984)

- The survey of ber, bael, aonla, lasoda and other arid zone fruits has been conducted in Jaipur villages for find out the resistance germplasg, frost, insect pest and diseases. During the survey one germplasm of ber has been identified, Which have profuse fruiting with medium size fruits and fruits are born in clusters/bunch i.e. 5 to 7 in number and no any fruit fly and powdery mildewsymptom and found on effect of frost.
- For the management of lemon butterfly in bael Spinosad 45 SC 0.2 ml/litre followed by *Bacillus thuringiensis* var. Kurstaki 0.1% and Neem oil 0.1 % were proved very effective.
- Alternaria leaf spot of Indiancherry / Lehsua / Gunda (*Cordia myxa*) can be controlled by two foliar sprays of tebuconazole 50%+ trifloxystrobin 25% (75 WG) (@ 1 g/litre) or carbendazim 12% + mancozeb 63% (2 g/litre) at 20 days interval starting from disease initiation during fruit bearing stage in April to June for harvesting higher fruit yield (In POP, Sept., 2021 and in National Annual workers group meeting of AICRP on AZF at ANDUAT, Kumarganj, Ayodhya, UP during 28.4.2022 to 30.05.2022.

10. AINRP on Soil Arthropod Pests, RARI, Durgapura, Jaipur (Year 1985)

- For the management of soil arthropods in groundnut crop, soil application of Neem cake @ 250 kg/ha, seed treatment with Imidacloprid 600 FS @ 6.5 ml per kg seed, application of Beauveriabassiana – 0.5g/m 2 and application of imidacloprid 17.8 SL @ 300 ml/ha at 20-25 DAS is most effective.
- For the management of termite in chickpea, drenching the crop with imidacloprid 17.8 SL @ 360 ml or fipronil 40% + imidacloprid 40% per ha is most effective.
- For the management of termite in chickpea, seed treatment with imidacloprid 600FS @ 6 ml per kg seed is most effective.

11. AICRP on Arid Legumes, RARI, Durgapura, Jaipur (Year 1986)

- One variety of cluster bean RGr 18-1 (Karan Guar 14) identified at National level.

Name of the Variety	Salient Feature of the Variety
RGr 18-1 (Karan Guar 14)	
Year of identification & release	Identify during Annual group meeting of AINP Arid Legumes at CSKHPKV Palampur, May, 10-11-2022
Special features	• Higher grain yield (10-15 q/ha). • Resistant to moderately resistant against bacterial leaf blight, root rot and alternaria blight. • Lower incidence of white fly, leaf hopper and aphid than checks. • It has good endosperm (32.26%) and gum content (29.0%) with high viscosity profile (3412 cp). • Plant are branched with trip innate leaf & serrated margin and bearing pink flower. • Seeds are light grey in colour and medium bold (2.7-3.3 g/100 grain). • It is a medium maturing variety (95-96 days).

Karan Guar 14

Karan Guar 14

- Under this project, 2 coordinated trials and 3 station trials in guar and one coordinated and 3 station trials of cowpea were carried out.
- Under this project, three entries of guar (GD 562, GD-568 and GD-570 and three entries of cowpea (CPD 269 followed by CPD 173 and CPD 286) were promoted in IVT at national level. Two entry of guar (GD 565 and GD 567) promoted from IVT to AVT I and two entries of guar (RGr 20-15 and RGr 20-7) were promoted from AVT I to AVT II.
- 150 germplasm accessions of guar and 100 germplasm accessions of cowpea were planted for maintenance and rejuvenation
- In breeding materials, F1 (20), F2 (60), F3 (235), F4 (60), F5 (80), F6 (80), F7 (84) and Bulk (27) in guar and F1 (10), F2 (29), F3 (75), F4 (79), F5 (80), F6 (84), F7 (59) and Bulk (29) in cowpea were advanced to the next generation.
- During this year, 18 new crosses in guar and 12 new crosses in cowpea were made by using different donors.

- The M2 generations generated by different treatment of gamma rays and SA in guar variety *viz.* RGr 12-1 and RGC 1038 and cowpea variety viz. RC 101 and RC 19 were evaluated and 200 single plants of guar and 300 single plants of cowpea with desirable traits and high yield were harvested.
- 250 individual plant selections of each released varieties of guar *viz.* RGC-1003, RGC-936, RGC-1017, RGC-1002, RGC-1055, RGC-1066, RGC-986 RGC-197, RGC-1038, RGC-1033 and RGr-12-1 were maintained as NSS I for maintaining genetic purity. Total 40 kg nucleus seed at NS I and 365 Kg seed at NS II stage of different varieties of guar were produced.
- 300 individual plant selections of each released varieties of cowpea *viz.* RC 19, RC 101 and CPD 119 were maintained as NSS I for maintaining genetic purity. Total 15 kg nucleus seed at NS I and 110 Kg seed at NS II stage of different varieties of cowpea were produced.

12. AICRP on Taramira, SKNCOA, Jobner (Year 1988)

- RTM-1624 (Krishna Tara)variety was identified, notified and release in the year 2021-22 for all the taramira growing area of India.

Name of the Variety	Salient Feature of the Variety
Taramira: RTM-1624	The variety has wider adaptability (Krishna tara) and stability under rainfed condition. This variety having shining in the seed and colour of seed is brownish yellow with highest oil content. RTM-1624 is resistance to white rust and moderately resistant to Staghead &, Downy mildew diseases and very less infestation of aphids. The variety has wider adaptability and stability under rainfed condition. This variety having shining in the seed and colour of seed is brownish yellow with highest oil content. RTM-1624 is resistance to white rust and moderately resistant to Staghead &, Downy mildew diseases and very less infestation of aphids.

- 110 Germplasm of taramira were screened for higher yield, oil content and Orobanchae tolerance, out of those only four germplasm were identified for higher yield.
- 1000 germplasm lines of mustard against orobanche tolerance were evaluated, out of these, 22 germplasm lines were identified for orobanche tolerance.
- Application of hydrogel @ 5.0 kg/ ha along with two foliar spray of salicylic acid @ 200 ppm at flowering and Siliqua formation stage is recommended for higher seed yield of mustard which fetches maximum net returns.

13. AICRP on Integrated Farming System, RARI, Durgapura, Jaipur (Year 1988)

- Under this project the feasibility of IFS model for maximize employment and income of small farmers. Under the model, complementary and supplementary enterprises were taken along with cropping. During the year IFS model generated the net profit of Rs. 2,32,209 with 893 man days employment. Within the model, the maximum contribution was from dairy (37.33%) followed by cropping (23.82%), gottery (17.81%) and horticulture (15.63%) within respect to gross returns. Further, due to adoption of the model the total value of inputs purchased from market is about 26% while the value of input generated and recycled within the system is about 21% and there was 23% saving due to recycling of farm products.
- Cropping system research trail was conducted to identity the appropriate cropping system with high productivity to suit the specific need of farmers through diversification and/or intensification and results revealed that maximum Pearlmillet Equivalent Yield (24432 kg/ha), maximum mean gross returns (Rs. 490014/ha), net returns (Rs. 350681/ha) and maximum mean B:C ratio (3.52) was recorded under groundnut (immature pods)-onion followed by groundnut- wheat (17251 kg/ha, Rs.346567/-, Rs. 238567/- & 3.21) while the least were recorded under cowpea- mustard (3839 kg/ha), Rs. 77608/-, Rs. 41608 and 2.16) cropping system.
- Under this project 48 demonstrations cum experiments on farmers field were also conducted under on farm research at COA, Lalsot. The results of the OFR indicated that productivity and profitability of selected marginal farmers was measurably enhanced through introduction of interventions and diversification in existing farming system adopted by the farmers.

14. AICRP on MULLaRP, RARI, Durgapura, Jaipur (Year 1988)

- In this project, 6 station trials, 7 NIVT trials and 4 AVT trials of different crops *viz.*, lentil, mungbean, urdbean, field pea were conducted.
- During this period, 104 germplasm lines of lentil and 94 lines of mung bean were evaluated.
- Mungbean variety RMG-1166 promoted in AVT-1 in NWPZ Zone and Urd bean entry RUG-59 in AVT-1 in CZ Zone.
- Basic seed of four varieties of RMG-975 (115 kg), MSJ-118 (120 kg), RLG-5 (40 kg) and RFPG-4 (50 kg) were produced.
- During this year, 1084 segregating lines/Plants of mung bean, 432 segregating lines/Plants in lentil and 280 segregating lines/plants were evaluated 14 crosses in mungbean, 7 in urd bean, 35 in lentil and 15 in field pea were also attempted.

15. AICRP on Chickpea, RARI, Durgapura, Jaipur (Year 2001)

- One variety CSJK174 (Karan Kabuli 4) released and notified CVRC in its 87th meeting held on 18th October, 2021 vide Notification No. S.O. No. 8 (E), dated 24th December, 2021.

Name of the Variety	Salient Feature of the Variety
Chickpea:CSJK 174 (Karan Kabuli 4)	
Year of identification & release	Released by CVRC in its 87th meeting held on 18th October, 2021 Notification no.S.O. No. 8 (E), dated 24th December, 2021
Special features	It has given 15% higher seed yield (1472 kg/ha) over the best check KAK-2. It is early maturing variety (99 days) with 52.5 cm plant height. Seed are medium-large with attractive beige-color. It is moderately resistant against wilt, Stunt disease and pod borer.

- During this year, total 9 Station and 8 coordinated trials were carried out and total 144 entries in station trials and 200 entries in coordinated trials were evaluated on different aspects.
- Nine entries RSGD 1125, RSGD 1119, RSGD 984, RSGD 1155, RSGD 1137, RSGD 1068, CSJK 132, CSJK 169, RSGD 997 and RSGD 965 were promoted in IVT and entries RSGD 1116, CSJ 824, CSJK 138, RSGD 1174 and RSGD 834 were promoted under IVT to AVT.
- Total 1800 germplasm accessions were planted for maintenance and rejuvenation. 55 newly collected germplasm lines from ICRISAT for extra early, drought and heat tolerance and 83 NBPGR lines selected on the basis of DRR and drought were well maintained and using in station crossing programme.
- The breeding material in various filial generations *viz.*, F1 (54), F2 (18), F3 (90), F4 (378), F5 (176), F6 (102) and Bulk (102) were advanced to the next generation during this year.
- 21 new crosses were made by using identified donors of different traits like seed yield disease resistance, seed quality seed color and seed size etc.
- Single plant selection of each released varieties *viz.* RSG 974, RSG 991, CSJ 515 RSJG 6, CSJK 6, CSJK 54, CSJK 21, CSJK 174, RSGD 926, RSG 807, RSG 888, RSG 884, RSG 895, RSG 896, RSG 902, RSG 931, RSG 945, RSG 963 and RSG 973 were maintained. Total 1000 kg nucleus seed of different varieties were produced.

16. AINRP on Onion and Garlic, SKNCOA, Jobner (Year 2008)

- In this project, 20 trials (Kharif-4, late kharif-2 and Rabi-9 of onion and 2 garlic of crop improvement and three crop production) were conducted.
- In this year, 49 germplasm lines were evaluated and 12 germplasm was collected from different areas.
- 50 kg seed of Bhima Shakti and RO-59 were produced.

17. AICRP on Weed Management (Voluntary Centre), RARI, Durgapura, Jaipur (Year 2020)

- New voluntary centre of AICRP on Weed Management was given to SKNAU, Jobner at RARI, Durgapura.

RKVY projects

1. Establishment of Herbal Park and Post-Harvest Processing in Medicinal and Aromatic Plants

This project was sanctioned in the year 2018-19 with worth of Rs. 20.26 lakhs. Work done in this project includes, establishment of herbal park (0.20 ha), maintenance of 50 species of medicinal & aromatic plants, multiplication of quality planting material of important medicinal & aromatic plants to distribute farmer.Seedlings of Neemgiloye, Ram Tulsi, Kali Tulsi, Kateli, Kalmegh and kalongi is raised in herbal park.

2. Quality seed production of important vegetables under semi-arid conditions

This project was sanctioned in the year 2020-21 with worth of Rs. 121.72 lakhs. In this project quality seed of different vegetable crop specially suited to the agroclimatic zone IIIa will be produced under this project. Produced seed of different rabi & kharif season vegetables.

3. Standardization and Characterization of Liquid Organic Formulations

This project was sanctioned in the year 2020-21 with worth of Rs. 56.56 lakhs. The major aim of this project is to develop standard protocol for liquid organic formulations. Identify the different methods to develop different liquid organic formulations i.e. Panchgavya, Jivamrit, Vermivash, Matkakhad, Compost tea. Preparation of different liquid organic formulations are under progress.

4. Centre of Excellence on Applications of Artificial Intelligence in Agriculture

This project was sanctioned in the year 2021-22 with worth of Rs. 153.23 lakhs. Because of late release of funds for financial year 2021-22 only procurement of drones & softwares has been completed.

5. Modernization and Mechanization of College of Agriculture Lalsot

This project was sanctioned in the year 2021-22 with worth of Rs. 184.83 lakhs.Project work is under progress.

6. Developing Agri-entrepreneurship for rural youth self-reliant through mushroom production technology

This project was sanctioned in the year 2021-22 with worth of Rs. 96.50 lakhs.Project work is in initial phase.

Other ongoing ad-hoc research projects:

1. DUS Project on Barley running at RARI, Durgapura funded by PPVFRA with total cost of Rs. 19.44 lakhs. During 2021-22.
2. Project on "Studies on Effect of Nano Nutrients and Biostimulants on Crop Performance and Soil Health" funded by IFFCO, New Delhi sanctioned for two years (2021-2023) at RARI, Durgapura, Jaipur with total project cost of Rs. 12.73 lakhs. In this project experiments were conducted on Nano fertilizers and biostimulants during Kharif, 2021 and Rabi 21-22.
3. Project on "Studies on Response of Dihydrate Polyhalite Fertilizer on Crop Growth, Yield and Soil Health under Semi-Arid Conditions of Rajasthan" sanctioned for 3 years (2021-2024) funded by Anglo American Crop Nutrients (Sirius Minerals India Private Ltd, New Delhi) at RARI, Durgapura with total project of Rs. 19.69 lakhs. In this project Experiments were conducted on Poly-4 fertilizers during Kharif, 2021 and Rabi 21-22. To study the leaching column one Laboratory experiment has also been conducted.
4. Project on "Development and Evaluation of Fortified Liquid Biofertilizer on Crop Performance and Soil Health" sanctioned for two years (2021-2023) by IFFCO, New Delhi with total project cost of Rs. 10.10 lakhs. Experiments were conducted on fortified bio fertilizers during Kharif, 2021 and Rabi 21-22.
5. Project on "Genetically enhanced micro-nutrient – dense pearl millet grains for improved human nutrition in the Western Africa region and India" – Harvest-Plus Programme funded by ICRISAT is running from

year 2010 at RARI, Durgapura, Jaipur. In this project Screening of the material having high Fe & Zn content have been done and released two biofortified hybrids RHB-233 & RHB-234.

6. Research project entitled “Thrust area-1: Development of disease resistant, early maturing hybrids for North-Western Region of India and Thrust area-2: collection, evaluation, characterization and conservation of pearl millet landraces and farmer’s varieties” was running from the year 2013 at RARI, Durgapura funded by ICAR, New Delhi. During 2021-22 some early maturing breeding lines were developed.

7. Project on "Consortia for Research Platform (CRP) in ‘Biofortification in selected crops for nutritional security" is continuing from 2015 funded by ICAR worth Rs. 1.85 lakhs. During 2021-22 this project contributed breeding lines having high Fe and Zn content in coordinated trials.

8. Creation of seed hubs for increasing indigenous production of pulses in India by NFSM Govt. of India

9. Evaluation of chickpea germplasm for drought and DRR under CRP Agro biodiversity by NBPGR New Delhi

10. Monitoring of Pesticide Residues at National Level, Dept. of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture and Farmers welfare, Govt. of India

11. Forecasting Agricultural output using Space, Agro-Meteorology and Land based observations (FASAL)

12. Establishment of Mother Plant Nursery for high pedigree planting material of fruit crops (Pomegranate, Jamun, &Bael).

13. Multiplication testing trial on wheat and barley from AICRP on wheat and barley-Karnal.

14. Evaluation of bio-efficacy of spinetoram 12% SC against Desert Locust (S. gregeria):

15. Research project entitled "Characterization of chickpea germplasm resource to accelerate genomics assisted crop improvement (sub component dry root rot) " sanctioned for 5 years (2020-2024) and funded by DBT, New Delhi with the worth Rs. 125.39 lakhs.

16. Screening of chilli germplasm against Chilli Leaf Curl Virus, ICAR-NBPGR, New Delhi sanctioned for two years (2019-2021)

17. Screening of chilli and tomato germplasm against Leaf Curl Virus, IIHR, Bengaluru sanctioned for one year May 2021 to April, 2022.

New projects

(A) RKVY projects

1. Centre of Excellence on Applications of Artificial Intelligence in Agriculture funded by RKVY with the worth of Rs. 153.23 lakhs.

2. Modernization and Mechanization of College of Agriculture Lalsot funded by RKVY with the worth of Rs. 153.23 lakhs.

3. Developing Agri-entrepreneurship for rural youth self-reliant through mushroom production technology funded by RKVY with the worth of Rs. 96.50 lakhs.

(B) NABAARD Project:

1. Development of Integrated Farming System (IFS) Model as Demonstration Unit for Sustainable Agriculture funded by RKVY with the worth of Rs. 39.64 lakhs.

Technologies developed

ZONE-II A

1. For effective control of weed in green gram crop, foliar spray of Imezathypr (10% SL) @ 80g a.i. per hectare in 500-600 liter of water should be done at 25 days after sowing is recommended.

2. Foliar spray of Salicylic Acid (SA) 200 ppm (200mg/lit) at 40-50 days crop growth stage under heat stress condition in guar crop is most effective.

3. Soil application of Ferrous Sulphate (19%) @ 15 kg/ha in Iron deficit soils or when Zinc deficiency symptoms are visually seen in the standing crop applies foliar spray of Zinc Sulphate (33%) @ 0.5 % in the pearl millet crop is recommended.

4. For the management of root rot in the cluster bean crop, mix *Trichoderma harzianum* @ 5 to 10 kg per hectare with 50 to 100 kg FYM 15 days before sowing is recommended.

5. Treat the seed with Tebuconazole @ 2 gm per kg seed or *Trichoderma harzianum* @ 10 gm per kg seed are most effective for the management of root rot in the cluster bean crop.

6. For better management of whitegrub, seed treated with Imidacloprid 600 F.S. @ 6.5 ml/kg seed or clothianidin 50 WDG @ 2.0 g/kg seed before sowing of groundnut crop is most effective.

7. For better management of whitegrub, seed treated with Clothianidin 50 WDG at 7.5 g/kg seed and imidacloprid 600 FS at 8.75 ml/kg seed before sowing of bajra crop.

8. Plantation of *Hardwickia binata* tree species at 400 tree/ha density for obtaining optimum growth and volume under rainfed condition.

9. *Hardwickia binata* based agri-silviculture system at 5x5 m spacing intercropping was taken only upto 15 years.

10. Intercropping of Cluster bean, Pearl millet and Cowpea kharif crops is beneficial in khejri (*Prosopis cineraria*) based agrisilviculture system in rainfed condition

11. Pearl millet hybrid Varieties RHB-223 and MPMH-21 included in package of practices.

12. Twenty five days after sowing of fenugreek crop, application of Imezathypr (10% SL) @ 75 g a.i per hectare in 500-600 liter of water for weed control in fenugreek crop is recommended.

13. First date of sowing (Third week of October) and 45 cm line spacing were suitable for heat stress condition in the mustard crop.

14. Foliar application of 200 ppm (SA) and first date of sowing (third week of October) were suitable for high temperature condition in the mustard crop.
15. Basal application of ferrous sulphate @ 15 kg/ha with 0.5% foliar spray 45 days after sowing of wheat crop under high RSC irrigated water is most effective.
16. The CCC (1000 ppm) application at 60 and 90 days is recommended for early maturity of crop to check bolting, higher yield and longer storage of bulbs in the onion crop.
17. High yielding Mustard varieties DRMR-150-35 and DRMR-1165-40 included in package of practices.

ZONE-III A

1. PE application of Atrazine @ 500 g a.i./ha followed by POE application of Tembotrione 42% SC @ 90 g a.i./ha at 3-4 leaf stage (15-20 DAS) of weeds significantly controlled the weed population and increased pearl millet productivity under rainfed condition with maximum net returns and B:C ratio.
2. Seed inoculation with Rhizobium, PSB and SSB through liquid biofertilizer @ 5-10 ml/kg seed along with recommended doses of fertilizer recorded maximum pod yield of groundnut, net returns and B:C ratio.
3. For the management of whitegrub and termite in standing pearl millet crop, drenching with Imidacloprid 17.8 SL @ 60 g a.i./per ha at 21 days after sowing is most effective.
4. For the Integrated management of yellow vein mosaic disease of okra, seed treatment with thiamethoxam 30% FS @ 4g/kg seed and sequential spray of pyriproxifen (5% EC) + fenpropathrin (15%EC) @ 1ml/l, spiromesifen 22.9% SC @ 1ml/l, buprofezin (25% sc) @ 2ml/l and neem oil @ 3ml/l at 10 days interval is recommended.
5. To get highest net returns and B:C ratio in clusterbean, foliar spray of soluble NPK (19:19:19) @ 1% at flower initiation (45 DAS) & pod formation stage (65 DAS) is most effective.
6. For management of moongbean pests, seed treatment with carbendazim @ 2.0 g, thiamethoxam 35FS @ 5.0 g and Rhizobium 25 g/kg seed, grow one line of millet as trap crop around the field boundary, use *Helicoverpa armigera* pheromone trap @ 10 and yellow sticky trap 50 per ha. Application of neem oil (1500 ppm) @ 1.5 ml/l at 30 days after sowing and followed by application of Chlorantarniliprole 18.5 SC @ 0.20 ml/L after 10 days of first spray.
7. For management of sucking pests of cowpea, apply first spray at pest appearance and second spray at flowering stage of "*Verticillum lecanii* @ 5 ml/litter was found most effective.
8. For the integrated management of soil arthropod pests in groundnut crop apply Neem cake @ 250 kg/ha in soil before sowing, then treat the seeds with imidacloprid 600FS @ 6.5 ml/kg seed, then apply Beauveriabassiana@ 0.5 g/m^2 at 15 days after sowing followed by application of imidacloprid 17.8 SL @ 300 ml/ha at 21-25 days after sowing.
9. Application of *Paecilomyces lilacinus* @ 10g/ m^2 area in nursery treatment is best fungal bio-agent for the management of Root-knot nematode. This bio-agent decrease the nematode population and improved tomato yield. Okra crop used as trap crop and okra uproot after 18 days from date of germination and transplanting of tomato at same place in main field.
10. For bunch varieties having recommended plant spacing of 30 x 10 cm and average Hundred karnel weight (g) 40 gms, the seed rate should 100 kg kernel ha^{-1}. For spreading and semi spreading varieties having recommended plant spacing of 40-45 x 10 cm, the optimum seed rate of groundnut should be based on their hundred kernel weight as below

Hundred karnel weight (g)	Recommended seed rate kernel (kg/ha)
40-50	100-110
50-60	120-140
60-70	145-160
70-80	165-185
80-90	190-210

11. Drip irrigation at an interval of 3 days with water equals to 80% of actual evaporation of this duration is recommended for wheat. It improves 26.66% crop productivity along with 31.11% water saving as compared to surface irrigation in wheat.

12. Drip irrigation at an interval of 4 days with water equals to 60% of actual evaporation of this duration is recommended for barley. It improves 24.12% crop productivity along with 24.35% water saving as compared to surface irrigation in barley.

13. Drip irrigation at an interval of 5 days with water equals to 60% of actual evaporation of this duration is recommended for mustard. It improves 32.26% crop productivity along with 23.48% water saving as compared to surface irrigation in mustard.

14. Drip irrigation at an interval of 6 days with water equals to 40% of actual evaporation of this duration is recommended for gram. It improves 22.73% crop productivity along with 27.15% water saving as compared to surface irrigation in gram.

15. Drip irrigation at an interval of 3 days with water equals to 80% of actual evaporation of this duration is recommended for fennel. It improves 27.73% crop productivity along with 33.03% water saving as compared to surface irrigation in fennel.

16. Alternaria leaf spot of Indian cherry/Lehsua/Gunda (Cordiamyxa) can be controlled by two foliar sprays of tebuconazole 50%+ trifloxystrobin 25% (75 WG) (@ 1 g/litre) or carbendazim 12% + mancozeb 63% (2 g/litre) at 20 days interval starting from disease initiation. Spraying of these fungicides during fruit bearing stage in April to June can be more economic for harvesting higher fruit yield.

17. Application of hydrogel @ 5.0 kg/ha along with two foliar spray of salicylic acid @ 200 ppm at flowering and siliqua formation stage significantly increased seed yield of mustard which fetches maximum net returns.

18. For the management of termite in chickpea, seed treatment with Imidacloprid 600 FS @ 5 ml per kg seed is most effective.

19. For the management of termite in standing chickpea crop, drenching the crop with Imidacloprid 17.8 SL @ 360 ml or Fipronil 40% + Imidacloprid 40% 500 gram per ha is most effective.

20. Thrusting of wire + pouring of Neem oil 2 ml + plugging of holes with mud proved very effective for the management of Bark eating caterpiller of ber, *Indarbella tetraonis*.

21. Application of hydrogel @ 5 kg/ha at time of sowing followed by two foliar sprays of NPK (19:19:19) @ 0.5% at pre-flowering and at pod formation stage significantly increased seed yield and WUE of chickpea which fetches maximum net returns and B:C ratio.

22. Seed inoculation of Chickpea with Rhizobium + PSB+ SSB+ Zn solubilizer through liquid biofertilizer @ 3-5 ml /kg seed along with recommended doses of fertilizers recorded maximum seed yield, net returns and B:C ratio.

23. Seed inoculation with Azotobacter, PSB and SSB through liquid biofertilizer @ 3-5 ml/kg seed along with recommended doses of fertilizer recorded maximum seed yield, net returns and B:C ratio of mustard.

24. Seed inoculation with Azotobacter, PSB and SSB through liquid biofertilizer @ 3-5 ml/kg seed along with recommended doses of fertilizer recorded maximum seed yield, net returns and B:C ratio of wheat.

25. Based on three crop cycles ground nut (immature pods)-Rabi Onion cropping system is recommended for income enhancement of farmers.

26. Seed coating on hydro primed seed (4h @ 20°C) with Drought Alleviating Bacteria + Biogrow for enhancing planting value of seed under optimal and sub-optimal conditions in Kabuli Chickpea.

27. Seed dressing with *Trichoderma viride* @ 10 gm/ kg seed followed by 2 foliar sprays of tebuconazole or difenconazole @ 0.1 % after disease initiation at 10-15 days interval was found to give maximum seed germination and field emergence, minimum percent disease incidence (PDI), and maximum seed yield of onion and both these treatments were at par with each other. Based on BC ratio Tebuconazole is cheaper in comparison to Difenconazole and can be recommended to farmers. Among the three botanicals tested crude leaf extract of neem gave best control of stemphylium blight as compared to Lantana camara and *Pongamia pinnata*.

ZONE-III B

1. Application of Imazethapyr @ 50g a.i /ha after 35 days of sowing is recommended for weed management in lentil and gave significantly higher seed yield with lower weed dry weight over control.

2. Seed dressing with Thiamethoxam 70% WS @ 122g a.i/ha was found most economical and effective against termite management in wheat. It also recorded higher yield with minimum termite infested tillers.

3. Spray of Imidacloprid 17.8 SL @ 20g a.i/ha was found most effective against mustard aphid and resulted in higher yield.

4. Application of 75% RDF+ Foliar spray of N:P_2O_5:K_2O @ 2% at 50% flowering significantly increase the yield over control in Bajra and Moong bean.

5. Maximum economic returns were obtained by sowing Pearl Millet + Moong bean rows in the ratio of 4:2.

6. The Pearl millet hybrid viz. Pusa composite-701, Dhanshakti, MPMH-21 and RHB-233 with significantly higher grain yield is recommended for cultivation in the zone.

7. Cluster bean variety HG-884 included in package of practices for cultivation in the zone.

8. Sesame variety HT-2 included in package of practices for cultivation in the zone.

9. Green gram varieties MJS-118 and RMG-975 were found beneficial and recommended for cultivation in the zone

10. Black gram varieties viz. Pratap Urd-1, Pratap Urd-2 and Mash-479 have been found beneficial and recommended for cultivation in the zone.

Revenue Generation:

Testing trials

The university also undertakes testing of the chemical /varieties/ other new molecules of private companies for the welfare of farmers. It provides opportunity to the scientist for using his skill/specialization along with source of revenue generation in the university. During the reporting period 32 projects on private testing were conducted by various scientists at different stations and generated a revenue of Rs. 95.11 lakh. The details of private testing trials as follows-

- Testing of 86M94 Hybrid of Pearl Millet funded by Corteva Agri Science Pioneer Hi-Bred Pvt. Ltd with the worth of Rs. 2.0 lakh.
- Evaluation of Pearl millet hybrid 86M20 funded by Corteva Agri Science Pioneer Hi-Bred Pvt. Ltd with the worth of Rs. 2.0 lakh.
- Testing of Pearl millet Hybrid PA9180 funded by Lead Market development-C & S, Bayer Crop Science Ltd. with the worth of Rs. 2.0 lakh.
- Evaluation of BAS 751 01 F (Fungicide) against frog eye leaf spot and target leaf spot diseases of soybean funded by KSHITIJA BHINGARDE BASF India Limited with the worth of Rs. 2.0 lakh.
- Testing of millet hybrid 7711 funded by Seed works International Pvt. Ltd. with the worth of Rs. 2.0 lakh.
- Bio-efficacy evaluation of our seed treatment product “UPST 119” in groundnut for two seasons funded by UPL India Limited with the worth of Rs. 4.0 lakh.
- Testing of Pearl millet hybrid LG70401 & LG70501 funded by Limagrain Field Seeds with the worth of Rs. 4.0 lakh.
- Testing of bio-efficacy of ambition and bayfolan algae (bio stimulant) in groundnut funded by Bayer Crop Science Limited, Jaipur with the worth of Rs. 2.0 lakh.

- Bio-efficacy evaluation of bio-stimulant product “Opteine” in groundnut funded by UPL India Limited with the worth of Rs. 2.0 lakh.
- Bio efficacy data generation of Flumioxazin 50% EC in soybean funded by Rainbow Agro Sciences Private Limited with the worth of Rs. 6.0 lakh.
- Evaluation of bio efficacy and phytoxicity of product BITCOL-16 for the control of jassid, Thrips, Whitefly, Aphid and Pink Bollworm in Cotton funded by GSP Crop Science Pvt. Ltd with the worth of Rs. 4.0 lakh.
- Testing of efficacy, phyto-toxicity and effects on nature enemies studies of Fipronil 0.6% GR (Regent Ultra) in Chilli funded by Bayer Crop Science Limited, Jaipur with the worth of Rs. 1.20 lakh.
- Effect of application of Drip K Plus of Nutrient uptake, growth, yield and quality of Onion funded by FarsonsAgri Solutions Pvt. Ltd. with the worth of Rs. 2.25 lakh.
- Bio-efficacy evaluation of new insecticide ‘NII 2003’ against pest of Brinjal and Cauliflower funded by Nichino India Pvt. Ltd with the worth of Rs. 3.66 lakh.
- Testing of bajra hybrid SUPER 905 funded by Super Seeds (P) Ltd. with the worth of Rs. 2.00 lakh.
- Efficacy, phyto-toxicity and succeeding crop studies with Glyphosate IPA Salt 40% w/w SL-Pomegranated funded by Bayer Crop Science Limited, Jaipur with the worth of Rs. 4.00 lakh.
- Evaluation of bioefficacy and phytotoxicity of Afidopyropene 50g/1 DC against Aphids on Mustard crop funded by BASF India Limited with the worth of Rs. 2.00 lakh.
- Regarding testing of Mustard hybrid PA 5235 funded by Bayer Crop Science with the worth of Rs. 2.00 lakh.
- Regarding testing of Mustard hybrid PA 5232 funded by Bayer Crop Science Ltd. with the worth of Rs. 2.00 lakh.
- Regarding testing for bio-efficacy trials of botanical pesticides in Chilli funded by ORO AGRI-Regulatory Manager (India) with the worth of Rs. 2.00 lakh.
- Bio-efficacy & phyto-toxicity evaluation of Paclobutrazol 40% SC (Plant Growth Regulator) on plant growth and yield of Onion and its effect on succeeding crop funded by Sumitomo Chemical India with the worth of Rs. 4.00 lakh.
- Regarding testing of Mustard 45S42 CL performance-evaluation for Orobanche Control funded by Pioneer Hi-Bred Pvt. Ltd. with the worth of Rs. 2.00 lakh.
- Testing for bio-efficacy data generation of Clodinafop-propargyl on Wheat Crop funded by Rainbow Agro Sciences Pvt. Ltd. with the worth of Rs. 2.00 lakh.
- Evaluation of BAS 751 01 F (Fungicide) against frog eye leaf spot and target leaf spot diseases of soybean funded by BASF India Limited with the worth of Rs. 2.00 lakh.
- Testing for evaluation of bioefficacy and phytotoxicity of BAS 550 011 against Aphids on Mustard Crop funded by BASF India Limited with the worth of Rs. 2.00 lakh.
- Testing for bioefficacy evaluation for the product BUPROFEZIN 25% SC on Chilli Crop funded by Krish Biotech Research Pvt. Ltd with the worth of Rs. 2.00 lakh.

- Testing for evaluation of bioefficacy of Dry Root in Onion funded by Stanes & Company Limited with the worth of Rs. 2.00 lakh.
- Testing of four products one Humic acid and three PGPR Bio Stimulant funded by Asclepius Wellness Private Limited with the worth of Rs. 8.00 lakh
- Bioefficacy testing trial for Green miracle quotation for evaluation in Tomato funded by Stanes & Company Limited with the worth of Rs. 2.00 lakh.
- Evaluation of bioefficacy of Pepto in Chilli funded by Stanes & Company Limited with the worth of Rs. 2.00 lakh.
- Bio-efficacy trials on tomato crop by using Boom Gold and Boom TET funded by Devi Cropscience Pvt. Ltd. with the worth of Rs. 2.00 lakh.

Other trials

During the reporting period 4 trials i.e. IHT, APHT of pearlmillet, AVT of barley and IVT of mustard testing were conducted by various scientists at different stations and generated a revenue of Rs. 0.85 lakh.

Seed production:

Additional Director Research (Seeds) unit function as Coordinator and facilitator for quality seed production at colleges, ARS, ARSS and KVKs of SKNAU, Jobner. ADR (Seeds) monitored the production and supply of required quantity of breeder seeds with high purity and supply to Central Govt., State Govt., PSUs and private seed company. The high yielding varieties of certified and truthful label seeds produced at SKNAU are kept under sales at Colleges, ARS, ARSS and KVKs for generation off revenue to the university. Seed production in the university during 2020-21 been mentioned below.

A. Breeder seed production during 2021-22

Kharif 2021			Rabi 2021-22		
Crop	**Area (ha)**	**Production (q)**	**Crop**	**Area (ha)**	**Production (q)**
Clusterbean	10.00	84.27	Wheat	68.0	1955.3
Mungbean	12.50	51.04	Barley	9.0	306.2
Urdbean	4.00	7.60	Chickpea	5.5	68.0
Cowpea	4.00	14.00	Taramira	1.5	4.0
Groundnut	15.10	256.30	Fieldpea	1.0	2.5
Pearl millet	2.00	7.98			
Total	**47.60**	**421.19**	**Total**	**85.00**	**2336.07**

B. TFL/FS/CS seed production during 2021-22

Kharif 2021			Rabi 2021-22		
Crop	**Area (ha)**	**Production (q)**	**Crop**	**Area (ha)**	**Production (q)**
Cluster bean	75.2	498.55	Wheat	26.15	514.86
Groundnut	1.5	18.15	Barley	34.18	738.89
Moongbean	40.0	137.98	Gram	31.85	471.46
Urdbean	1.0	1.15	Mustard	96.40	1330.33
Cow Pea	11.0	36.1	Taramira	20.00	41.05
Sesame	0.5	0.5	Lentil	2.75	21.81
Okra	0.3	1.15	Fennel	4.70	25.23
Ridge gourd	0.1	0.11	Fenugreek	7.38	65.69
			Coriander	1.00	2.87
Total	**129.6**	**693.69**	**Total**	**224.41**	**3212.19**

Important meetings held:

(i) **Breeder seed production meeting of Rabi 2021-22 :** Breeder seed meeting was held for allotment of DAC indent to various units of the university including KVKs, ARSs., ARSSs and different station/farms. The Incharges of these units and plant breeders and ADR (Seed) were entrusted with the responsibility to monitor the breeder seed production programme along with the team from state government. During the reporting period, the meeting was held on 28 September, 2021.

(ii) **Pre – ZREAC Meetings:** The purpose of these meeting is to review the progress of research work conducted by scientists in kharif/rabi seasons at different stations. The meetings were held zone wise at the respective Agricultural Research Station. The scientists working in research presented their results and worked out the research programmes for next season as the local needs. Pre-ZREAC meetings for kharif 2022 and rabi 2021-22 were held as per schedule given below.

ZONE	Name of the Research Station	*Kharif* 2022	*Rabi* 2021-22
II A	ARS, Fatehpur - Shekhawati (Sikar)	22 March, 2022	Aug. 18, 2021
III A	RARI- Durgapura (Jaipur)	24-25 February, 2022	Aug. 3-4, 2021
III B	ARS, Navgaon (Alwar)	28 February, 2022	Aug. 6, 2021

(iii) **ZERAC Meeting**

ZONE	Name of the Research Station	*Kharif* 2021	*Rabi* 2021-22
II A	ARS, Fatehpur - Shekhawat (Sikar)	April 19-20, 2022	Sept. 2-3, 2021
III A	RARI - Durgapura (Jaipur)	April 6-7, 2022	Sept. 6-7, 2021
III B	ARS, Navgaon (Alwar)	March 15-16, 2022	Aug. 16-17, 2021

New Initiatives

1. Developed IFS modal for Zone-IIa at ARS, Fatehpur
2. Installation of BSNL Broad Band Air Fiber internet facility in office of ARS, Navgaon.
3. Sowing of kharif onion seed var. AFDR in 750 m^2 area for obtaining onion bulbs at ARS, Navgaon.
4. Seedlings of tomato and chilies were raised for sale at ARS, Navgaon.
5. For enhancement of pollination in crops, 150 boxes of honey bees were brought at ARS, Navgaon farm from private beekeeper.
6. Develop as sick plot for Orobanche screening at SKNCOA, Jobner

Facilities updated during the Year

RARI Durgapura

1. Hot Air Oven and TSL Bench Top microprocessor Rotary Shaker has been purchased under POLY-4 Project funded by Sirius India Minerals Private Limited, New Delhi at RARI Durgapura.
2. Kjeldahl Digestion cum Distillation Assembly installed at RARI, Durgapura under Fortified Biofertilizer Project funded by IFFCO, New Delhi.
3. Flame Photometer, Conductivity Meter and Muffle Furnace procured at RARI, Durgapura under Nanofertilizer Project funded by IFFCO, New Delhi.
4. Weed museum established under RKVY project at RARI, Durgapura.

ARS, Navgaon

1. Meeting/Conference Hall has been constructed at ARS, Navgaon.
2. Farmers Hostel has been constructed at ARS, Navgaon.
3. Farm Boundary Wall (490 M) has been constructed at ARS, Navgaon.
4. Two computers with printers have been purchased at ARS, Navgaon.

ARS, Fatehpur

1. Seed drill, 1-Multi crop thresher, 2-Tube wells, 2-Computer with printer, 1-Bush cutter and 1-submersibles motor 12hp and 2- Sprinkler sets, Drip irrigation facility installed in Agroforestry, 1-digital whether parameter display board at ARS, Fatehpur.

5. Extension Education Activities

The Directorate of Extension Education was set up on 13th November 2013 as the nodal Directorate in Sri Karan Narendra Agriculture University, Jobner with component of ATIC & Extension wing, keeping in view the major objectives of Extension Education in State Agriculture University. The Directorate of Extension Education operates KVKs in eight districts namely Ajmer, Alwar-I (Navgaon) and Alwar-II (Bansur), Jaipur-I (Chomu), Jaipur-II (Kotputli), Dausa, Bharatpur, Dholpur, Tonk, Sikar-I (Fatehpur) and Sikar-II (Sri Madhopur) and covers three agro-climatic zone namely IIa-Transitional Plain of Inland Drainage, IIIa Semi-arid Eastern Plain and IIIb-Flood prone eastern Plains. Its purpose is to promote agricultural development in the state through quick and efficiently transfer of technology by providing training, advisory and farm information to the farmers and professional extension personnel of line department. The Mission of the Directorate of Extension is 'Reaching the Unreached' for livelihood security, improved quality life, sustainability of agriculture complex, diversified & risk prone farmers for social equality & inclusive growth.

Objectives of the Unit:

- Conducting training programmes for farmers and extension functionaries of various departments of govt. of Rajasthan and non-government organizations on new technologies, emerging issues and design demonstration strategies for dissemination of modern technology.
- To conduct short and long duration vocational trainings for frontline farmers, Farm women, rural youth and school drop outs of the state.
- To provide farm information services through various extension activities including literature for quick dissemination of the technology.
- To monitor the KVKs & provide technical backstopping to ensure effective functioning.

Details of Farm/Instructional area/ Inventory

- All the 8 KVKs and DEE of SKN Agriculture University, Jobner have total land 189.87 ha out of which 108.0 ha land is under cultivation for seed production and 28.0 ha land is under orchard and live units. Besides this 27.34 ha land is under developing stage at KVK, Kotputli and Dholpur.
- Total 26.65 ha land under road and building infrastructure in all KVKs.
- Recently 25.50 ha land also allotted to DEE/ATIC for seed production.

Research/ infrastructure development projects

Krishi Vigyan Kendra, Navgaon

1. A project sponsored by Shayama Prasad Mukharjee Urban Mission, Zila Parisad , Alwar for infrastructure development i.e. construction work of meeting/training hall with ICT, agriculture machinery bank, agriculture technology gallery and water conservation (Drip, Sprinkler rain gun) demo unit is running at KVK, Navgaon. The project has total cost of 1.40 carore. The duration of project is 2020 to 2023.

Krishi Vigyan Kendra, Dholpur

1. A DAMU project sponsored by Ministry of Earth Science, IMD New Delhi is running at KVK, Dholpur. Project is aiming to provide weather based agro advisory bulletin on every Tuesday and Friday to the farmers through different mode. An Automatic Weather Station established at KVK Dholpur under this project. Project has total cost of Rs. 7.95 lakh for the year 2021-22.
2. A project entitled "Sustainable production & quality improvement of exotic vegetables (Broccoli & others) in Ram Sagar & Urmila Sagar sub-projects command area under RWSLIP running at KVK Dholpur. Under

this project KVK conducted demonstrations of exotic vegetable (Broccoli) at KVK and farmer's field. A total of five demonstrations were laid out at farmer's field in one hectare area recorded average yield 200 q/ha. The Project has total cost of Rs. 2.48 lakh.

3. A project on "Biotech Kisan Hub" sponsored by Ministry of Science & Technology, Department of Biotechnology, Government of India, New Delhi is running at KVK, Dholpur. The main objectives of this project is to work with small and marginal farmers especially for women farmer for better agriculture productivity through scientific intervention and evolving best farming practices in the Indian context. FLDs of different crops, establishment of fruit orchards (Kinnow & Mango) and Kitchen Gardening demo conducted in farmer's field.

Automatic Weather Station established at KVK Dholpur

Krishi Vigyan Kendra, Bharatpur

1. A NICRA project sponsored by ICAR-CRIDA, Hyderabad is running at KVK, Bharatpur from 2011. Total 590 demonstrations were conducted covering 318 ha area on in-situ moisture conservation, short duration, improved and drought tolerant varieties in adopted NICRA villages. 2nd phase of NICRA is from 2021-25. Total budget for year 2021-22 is Rs. 17.66 lakh.

Linkages and Networking

- All KVKs and ATIC has linkages with different govt. agencies i.e. NIAM, Govt. of India, Jaipur, SIAM, GoR, Jaipur, NRC on Seed Spices, CSWRI, Avikanagar, Tonk, DRMR, Bharatpur, Department of Agriculture, Animal Husbandry, Horticulture, ATMA (Govt. of Rajasthan), MANAGE, Hyderabad, NIPHM, Hyderabad, EEI, Anand, IFFCO, KRIBHCO, Rajasthan State Marketing Board, Rajasthan Mission on Livelihood, NABARD, FCI, Rajasthan State Warehouse Corporation for trainings of officers, youth, women and farmers for training, seed production, demonstration, diagnostic survey and awareness programme.
- All KVKs and ATIC have linkage with RSSC for foundation seed production programme to provide quality seed to the farmers.
- All KVKs and ATIC have linkage with different Agricultural Universities, affiliated colleges for training of RAWE/READY students.
- All KVKs have developed mobile app, what's app groups, Kisan Portal and SMS groups to disseminate recent information to the farmers and govt officials immediately.

Revenue generation

The Directorate of Extension Education and KVKs are funded by ICAR and University as well. Apart from this, DEE and KVKs generated revenue from different sources in revolving fund.

- A total of Rs. 34.80 lakh has been generated by the all KVK's from supply quality breeder seed to the govt. and TFL seed to the farmers.
- An amount of Rs. 8.92 lakhs has been generated from supply of quality planting material, nursery and fruit orchards.
- An amount of Rs. 10.83 lakhs has been generated from goatry, poultry and other animal units, vermicompost/earthworms/azolla and hybrid Napier.
- A total of Rs. 23.37 lakhs has been generated as resource through different sources (Straw auction, Tree auction, RAWE, Guest house, Training hall) by KVKs during the reporting year.
- An amount of Rs. 6.00 lakhs has been generated from the Sponsored training.

- An amount of Rs. 30.50 lakhs has been generated by DEE, Jobner from sale of seed, vegetables, seedlings, fishery, University diary, training and literature.

Animal Assets:

KVKs of SKNAU have been doing exemplary work in livestock sector. The activities mainly constitute dairying, sheep, goat, rabbit, poultry and quail rearing. In terms of resource generation, five Backyard Poultry units are running at Ajmer, Fatehpur, Bharatpur, Dholpur and Alwar KVKs and having 400 birds and KVK, Ajmer has also a quail unit (50 birds). A Sheep unit (12 sheep) is running at KVK Ajmer. Five goat units (166 goats) are running at Ajmer, Dausa, Alwar and Kotputli KVKs. KVK, Ajmer has also a Rabbit unit (10 rabbits). KVK, Ajmer, Kotputli, Navgaon, Fatehpur and Dholpur recently established Gir cow unit (16 Cow).

Awards and Appreciations to Farmers:

1. The women farmer Mrs. Rubi Pareek associated with KVK, Dausa received International Award 'Dharati Mitra' by Organic India.
2. Sh. Roop Chand Kahar, Village Nadi I, Saradhana, Ajmer received district level award by ATMA, Ajmer in horticultural activities.
3. Sh. Ashish Sharma, Ajmer received Best Agriculture Entrepreneur Award during Kisan Mela organized by DEE, SKNAU, Jobner.
4. Progressive Farmer Smt. Rekha Devi, Dholpur awarded with State level Best Karonda Award during State Level Karonda Show at RARI, Durgapura, Jaipur, organized by SKNAU, Jobner.
5. Progressive farmers associated with KVK, Dholpur, Sh. Surendra Chauhan, Sh. Rajesh Kumar, Sh. Fool Singh, Sh. Pramod, Sh. Lala Ram, Sh. Prakash Tyagi and Sh. Rameswar Meena received appreciation certificate during Agri Expo-2022 organized by SKNAU, Jobner from 27-29, March, 2022.
6. Progressive farmers associated with KVK, Bharatpur Sh. Hukam Singh, Sh. Harvir Singh, Sh. Harbhan Singh and Sh. Hariram received appreciation certificate during Agri Expo-2022 organized by SKNAU, Jobner from 27-29, March, 2022.
7. Sh. Suresh Yadav associated with KVK, Navgaon received District level Dairy Farmer award by Department of Animal Science, Alwar.
8. Sh. Anil Meena, associated with KVK, Navgaon received Block level Organic farmer award by ATMA, Alwar.
9. Sh. Keshar Dev from Athwas village associated with KVK, Fatehpur got State award in Jaivik Kheti-2022.
10. Progressive farmers associated with KVK, Kotputli Sh. Harshay Meena, Sh. Ashish Meena, Sh. Omprakash Meena, Sh. Ramkishan Meena, Sh. Ramswroop Meena received appreciation certificate during Agri Expo-2022 organized by SKNAU, Jobner from 27-29, March, 2022.
11. Sh. Atul Yadav associated with KVK, Kotputli received Block level Organic farmer award by ATMA, Jaipur.

ATIC: Agriculture Technology Information Centre established at Directorate of Extension Education, SKN Agriculture University Jobner during the year 2014 under the RKVY project. The funds for the ATMQIC Project have received by the State Department of Agriculture under RKVY Project.

Services being offered by the ATIC

1. Video Conference Room (capacity 50 persons)
2. Farmers Hostel (capacity 30 persons)
3. Smart Class Room (capacity 50 persons)
4. Agricultural Education Museum

5. Shed net for nursery
6. Solar system
7. Micro irrigation system (Drip & Sprinkler)
8. Water harvesting Structure
9. Agriculture Resource Centre
10. Graphic table for data presentation
11. Fish pond
12. Agriculture Kiosk

Agriculture Technology Information Centre (ATIC), SKNAU Outreach Activities

- Sri Karan Narendra Agriculture University, Jobner has adopted a village Pachar under "Developing Smart Village Model to achieve objectives of mission Antyodaya". ATIC, Directorate of Extension Education (DEE) organizes different extension activities in this village every month on regular basis.
- DEE, SKNAU organized three days online training programme on "Leadership Development and Team Building Skills for Extension Functionary" in collaboration with Extension Education Institute, Anand from 10-12 Jan., 2022 under the Chairmanship of Dr. Sudesh Kumar, Director, DEE and Dr. Nikita Thakor, Course Director emphasized on the role of soft skill, innovativeness, leadership and stress management.
- An Adult Literacy campaign was organized at Senior Secondary School, Ramjipura Kalan on 31 Jan., 2022. During the campaign Dr. Rajendra Rathore, Dy. Director, ATIC stressed on the importance of literacy in the social life. Anganwari supervisor, school teachers with 50 students actively participated in this campaign.
- A training programme on "Safety Food grain" under SC Sub Plan Scheme of SKNCOA, Jobner was organized on 09 March, 2022 at Ramjipura Kalan village under the Chairmanship of Prof. J. S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner. During the programme 30 storage bins were distributed to SC women farmers.

Smart village adopted by KVK's/DEE:

DEE: Directorate of Extension Education, SKNAU adopted two villages namely Pachar and Sunderpura under mission Antyodya scheme. Several activities i.e. Planation Programmes, Computer Literacy in Schools, Animal vaccination, establishment of azolla and vermicompost units, Swachha Bharat Mission, Camps for Senior Citizens, Bull Distribution in Goshala, Health Camps, Adult Literacy Programme, Cleanliness drive, De-addiction camps, Yoga Day etc. were performed at both the villages during the reporting year.

KVKs:

S.No.	Name of Village	Tehsil	Major crops & Enterprises	Activities organized/ Significant contribution
1	Nooriyawas	Pisangan	Cauliflower, Green Gram, groundnut, sorghum, bajra , guar, wheat, barley, onion	Organization of Training, FLDs, OFTs, campaign, field day etc.

2.	Gangarsoli	Kumher	Bajra, Wheat, Mustard, Cluster bean, Dairy -Buffalo	A total of total 178 demonstrations were conducted covering 52 farmers on recharge tubewell, low pressure drip irrigation system, vermi-composting, mineral mixture, *in-situ* moisture conservation, short duration, improved and drought tolerant varieties
3.	Dharampura	Maniya	Wheat, Mustard, Pearl millet, Sesame, green gram, okra, kitchen garden	Conducted FLD of different crops, establishment of fruit orchards (Kinnow) and Kitchen Gardening. Conducted training programme and organized field day
4.	Beelpur	Dholpur	Wheat, Mustard, Pearl millet, Sesame	Conducted FLD of different crops, establishment of fruit orchards (Kinnow & Mango) and Kitchen Gardening. Conducted training programme and organized field day
5.	Pathrola Kalan	Dholpur	Wheat, Mustard, Pearlmillet, Sesame	Conducted FLD of different crops, establishment of fruit orchards (Kinnow) and Kitchen Gardening. Conducted training programme and organized field day.
6.	Dandoli	Dholpur	Wheat, Mustard, Pearlmillet, Sesame	Conducted FLD of different crops, establishment of fruit orchards (Kinnow & Mango) and Kitchen Gardening. Conducted training programme and organized field day.

Achievement of the DEE/ KVK:

Spreading Sandal wood Fragrance at KVK Alwar

Taking inspiration from the experiences of Ruparam, a farmer from Hajipur Dadikar village, who had initiated sandalwood cultivation in his half bigha field five years ago, Agricultural scientists of Krishi Vigyan Kendra, Navgoan (Alwar-I) have planted 40 sandalwood plants in KVK campus. KVK scientists informed that due to its cosmetic and therapeutic value, there is huge market demand of its heartwood. It is highly profitable and needs less maintenance. Commercial sandalwood cultivation can tide over the financial crisis of farmers especially to those who find agriculture

Sandalwood Cultivation at KVK Navgaon

unviable.

Market Channelization of Moringa (Drumstick) powder through KVK, Ajmer

KVK, Ajmer has established a Drumstick leaf powder unit which will prove a boon to the farmers. Dr. D. S. Bhati, Sr. Scientist & Head informed that KVK, Ajmer will purchase Moringa pods and leaves from the farmers, will convert it in powder form and then finally it will be sold through FPO. Besides, KVK, Ajmer also established Drumstick (PKM-1 and PKM-2) orchard in 1 acre land. Dr. Sudesh Kumar, Director, DEE appreciated the effort of KVK, Ajmer and told this Moringa value addition will develop entrepreneurship among farm women.

Moringa cultivation at KVK Ajmer

Packaged Moringa at KVK Ajmer

Vegetable Seed Production Programme

Directorate of Extension Education, SKNAU, Jobner has started seed production of Okra and ridge gourd variety. Pusa Bhnidi-5 in Kharif Season has been taken for this purpose, which is resistant to yellow vein mosaic virus disease. Similarly, Pusa Nutan Variety of Ridge gourd is taken for Kharif season for seed production. The seed produced under this programmeis available at sale counter of SKNAU.

Establishment of Gir Cattle Unit at KVKs

Directorate of Extension Education, SKNAU, Jobner took a new initiative to establish a Gir cow unit at KVKs of Ajmer, Dholpur, Alwar, Fatehpur, Navgaon and Kotputli. Gir cattle are important indigenous cattle which has the capacity of yielding more milk with less feeding. This breed is known for its tolerance to stress conditions. These units at different KVKs will be virtuous demonstration models for the farmers.

Gir Cattle Unit at KVK, Dholpur

Animal Health Camp at KVK, Fatehpur-Shekhawati

In order to extend a helping hand to the livestock farmers of Jaleu village, Krishi Vigyan Kendra, Fatehpur-Shekhawati organized a day long Animal health camp and vaccination programme on 13 August, 2021. The main aim behind the animal health camp was to make farmers aware about animal health and also provide required treatment to their livestock. The programme was inaugurated by Dr. M. P. Yadav, Senior Scientist & Head, who emphasized the importance of livestock sector for livelihood security of farmers as well as sustainable organic agriculture. Dr. Mahendra Kumar, Veterinary Officer, Department of Animal Husbandry, Sikar

Animal Health Camp at KVK, Fatehpur-Shekhawati

elaborated about the existence of major livestock diseases in the locality, their preventive and control measures. A total of 52 animals were treated against various disease conditions and various livestock supplements were distributed among the animal owners. The animal health camp received overwhelming response from the farmers.

Jal Shakti Abhiyan

An awareness campaign on "Jal Shakti Abhiyan" was organized by all KVKs of SKNAU during July to Sep, 2021. The farmers were briefed about the background and objectives of "Jal Shakti Abhiyan" and they were explained about the various components like renovation of community ponds, strengthening of watershed activities for soil and water conservation, groundwater recharge and afforestation. During this programme different off campus trainings on "Water Use Efficiency and Appropriate Crops" were organized by KVKs in respective adopted villages. All KVK Scientists, University Officials, and more than 400 farmers joined this campaign.

Jal Shakti Abhiyanat KVK, Fatehpur-Shekhawati

Soil Testing Mobile Van

In a bid to bring soil testing labs closer to rural farmers, the mobile soil testing laboratory of Directorate of Extension Education, SKNAU covering the remote villages in all jurisdiction districts of SKNAU. Mobile soil testing laboratory provided the facility of on-the-spot analysis of soil along with the recommendations for the use of manure and fertilizers in correct proportion in agricultural fields in remote villages where laboratory facilities are not available.

SKNAU News and Views

The Directorate of Extension Education, SKNAU, Jobner published quarterly New letter "SKNAU News and Views". This newsletter contains all the events, happenings, achievements and accomplishments of all the constituent units of SKANU, Jobner.

University Calendar 2022

The Directorate of Extension Education, SKNAU, Jobner released University Calendar 2022. This calendar contains all the agricultural operations that have to be done by the farmers in different crops in every month for higher production.

Jobner Krishi

Directorate of Extension Education, SKNAU, Jobner published monthly Hindi magazine "Jobner Krishi". Jobner Krishi is being published regularly covering all research based articles useful for the farming community of the state. It is being circulated to all Agricultural Universities, ICAR institutes and Agricultural Departments in the State along with the ICAR head quarter, New Delhi.

Krishi Smarika 2022

A Souvenir (Krishi Smarika 2022) specially prepared for farmers' fair was released and distributed among the farmers during Agri Expo-2022 held on 28-30 March, 2022.

University Diary 2022

The Directorate of Extension Education, SKNAU, Jobner released University Diary 2022. University diary contains all the information regarding package and practices of all the cereals, oilseed, pulses, vegetables and fruits crop of state.

Organized trainings:

a. On Campus Training: (KVK, ATMA, DAESI and other trainings)

Duration of Trainings	Farmer/ Farm Women		Rural Youth		Extension Functionaries		Total	
	No. of trainings	No. of Beneficiaries	No. of trainings	No. of Beneficiaries	No. of trainings	No. of Beneficiaries	No. of trainings	No. of Beneficiaries
One day	48	1007	1	39	3	90	52	1136
2-3 days	119	3415	2	58	8	166	129	3639
One week	5	160	3	100	-	-	8	260
Two weeks	2	60	16	473	-	-	18	533
One months	-	-	1	25	-	-	1	25
Three months	-	-	-	-	2	80	**2**	**80**
One year	3	120	-	-	1	39	4	159
Total	177	4762	23	695	14	375	214	5832

b. Off Campus Trainings:

	Farmer/ Farm Women		Rural Youth		Ext. Functionaries		Total	
	Nos. of trainings	No. of Beneficiaries	Nos. of trainings	No. of Beneficiaries	Nos. of trainings	No. of Beneficiaries	Nos. of trainings	No. of Beneficiaries
One day	183	3458	19	373	1	20	203	3851

DAESI Training

One Year Diploma in Agricultural Extension Services for Input Dealers (DAESI) sponsored by MANAGE Hyderabad in collaboration with SIAM, Durgapura, Jaipur, organized at KVKs of SKNAU. Total 4 courses were organized during July, 2021 to June, 2022 in which 159 input dealers from Bharatpur, Alwar, Jaipur, and Sikar districts participated. The course is designed by MANAGE, Hyderabad with following objective:

- Orientation of input dealers on location-specific crop production technologies of broad-based agriculture with reference to field problems.
- Building the capacity of input dealers in efficient handling of Inputs.
- To impart knowledge about the laws governing regulation of agricultural Inputs.
- To make input dealers an effective source of farm information at the village level (one stop shop) for the farmers.

Fertilizer Retailer Training Programme

Krishi Vigyan Kendra, Fatehpur, Dausa, Dholpur and Bharatpur conducted 18 certificate course for input dealers of fertilizer during July, 2021 to June, 2022. In these 15 days certificate course, total 540 participants were benefitted with 42 theory and practical lectures. Through this programme youth can get easily license for fertilizer and compost sale.

Fertilizer Retailer Training Programme at KVKs

Scientific Beekeeping Training Programmes at KVK, Dholpur

Krishi Vigyan Kendra, Dholpur organized 6 seven days scientific beekeeping training programme under National Bee keeping & Honey Mission, National Bee Board, Govt. of India. These trainings were attended by 222 participants in all over from Dholpur district. Dr. Dinesh Kachhawa (SMS, Plant Protection) coordinated these trainings and explained about various aspect of beekeeping like identification of important caste of honey bee, European bee life cycle, seasonal management, queen bee rearing, laying worker, availability of flora, feed and feeding management, demonstration on honey extraction and management of insect-pests and diseases of honey bee.

Live Demonstration of Scientific Bee Keeping at KVK, Dholpur

B. Demonstrations:

Front Line Demonstration:

To show the worth of new technology the demonstrations are conducted on the farmers' field with the help of scientists so that the potential of newly developed technologies could be shown to the farmers. The operations are carried out in their presence so that they could also participate in various steps of operations because the principles of learning are at work- seeing believes and doing is learning.

- The Krishi Vigyan Kendras have conducted FLD/CFLD on oilseed, pulses, cereals, vegetables and spices in 985.44 ha. area at 2308 farmers field.
- The Krishi Vigyan Kendras have also conducted 350 Front Line Demonstrations on livestock during the year.

C. OFT's and Field days

OFTs and Field days are organized to show the worth of new technology through result demonstration of improved varieties and other technologies carried out on the selected farmers' field where other farmers' of the nearby villages could come and witness the results of new technologies. This induces confidence in farmers to adopt new technologies.

- Krishi Vigyan Kendras have conducted 230 on farm testing trials on oilseed, pulses, cereals, vegetables and spices on feed back problems identified by the farmers and Govt. officials in jurisdiction area of KVK.
- Krishi Vigyan Kendras have also conducted 182 on livestock on feed back problems identified by the farmers and govt. officials in jurisdiction area of KVK.
- Krishi Vigyan Kendras have also organized 45 Field Days on Oilseeds, Pulses, Spices and livestock in which 1886 farmers participated actively.

D. Organizations of Kisan Mela

Organization of Agri-Expo 2022

Three days "Agri Expo-2022" was organized by Directorate of Extension Education from 28-30 March, 2022 at Sri Karan Narendra Agriculture University, Jobner. The theme of the expo was "Stepping towards Smart Agriculture." The Expo was inaugurated by the Chief Guest Shri Ashok Gehlot, Hon'ble Chief Minister, GoR, Special Guest Sh. Lalchand Kataria, Hon'ble Minister of Agriculture, Animal Husbandry and Fisheries, Sh. Mahadev Singh Khandela, Chairman, Kisan Ayog, Sh. Babu Lal Nagar, MLA, Dudu, Sh. Khiladi Lal Bairwa, Chairman, SC Commission, Sh. Deep Chand Khairiya, MLA, Kishangarh Bas, Sh. Alok Beniwal, MLA, Shahpura, Sh. Suresh Modi, MLA, Neem Ka Thana, Sh. Ram Singh Rao, Chairman, Vanshavali Sarankshan evam Sanvardhan Academy, Prof. Jeet Singh Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner and Dr. Sudesh Kumar, Director, DEE. Sh. Ashok Gehlot, Hon'ble CM and Sh. Lalchand Kataria, Hon'ble Minister Agriculture took an overview tour of exhibitions and interacted with the exhibitors.

Inaugurations : Hon'ble Chief Minister of Rajasthan Sh. Ashok Gehlot inaugurated the Skill Development Centre, Advance Research Lab for Organic Farming, Academic block of SKN College of Agri-Business Management at Jobner, Staff quarters, Dean Residence and Water harvesting structures at CoA, Lalsot, Girls hostel and Dean Residence at COA, Fatehpur, Dean Residence and Girls hostel at COA, Kumher, Training hall, Farmer's hostel at ARS, Navgaon and Training hall and Machinery bank at KVK, Navgaon virtually, during the inaugural session of the Agri Expo-2022 on 28 March, 2022. The drone was also demonstrated to the Hon'ble Chief Minister, Rajasthan during this inaugural function.

Major attractions of the Expo: Drone demonstration, Soil and water sample testing, Hi-tech agriculture, FPOs and Agri-startups, Crop-fruits-quiz competition and University sale publications were the major attraction of this expo. Total 120 companies/institutions/NGOs/entrepreneurs etc. displayed their exhibitions in this expo and total 9500 farmers and 1500 students participated in this event.

Farmer's Fair at KVK, Ajmer

A Kisan Mela was organized by KVK Ajmer on 05 March, 2022. Padam Bhushan Dr. R.S. Paroda, Ex-DG ICAR was the Chief Guest, Dr. A.K. Singh, DDG (Extn.), ICAR as Special Guest and Dr. J.S. Sandhu, Hon'ble VC, SKNAU, Jobner was the Chairman of this event. Sh. Ansh Deep, District Collector, Ajmer, Dr. S.K. Singh, Director ICAR-ATARI, Jodhpur, Dr. B.L. Chippa, Ex-VC, SKRAU, Bikaner, Dr. Sudesh Kumar, DEE, SKNAU, Jobner were also present. Total 30 exhibitions were displayed for the visitors and 1300 farmers from the district turned up in this event. A series of informative lectures were delivered by various experts and soil samples of the farmers were also tested.

Glimpses of Agri-Expo 2022 at SKNAU, Jobner

Glimpses of Farmers Fair at KVK, Ajmer

Farmer's Conference cum Krishi Mela at KVK, Fatehpur

Farmer's Conference cum KrishiMela at KVK, Fatehpur

KVK, Fatehpur organized a farmer conference cum Krishi Mela at Shyampura village on 25 March, 2022, in which an array of farmer's friendly technologies displayed. Prof. Harphool Singh, Sr. Scientist and Head briefed about newly launched technologies, vegetable cultivation and poly houses. Shri Pramod Kumar, Joint Director of Agriculture and the Chief Guest hailed the KVKs efforts and urged farmers to take the advantage this programme by learning about latest agricultural technologies and schemes. Dr. S.R. Dhaka (ZDR), Shri S. N. Garhwal (PD ATMA), Shri Hardev Singh Bajiya (DDAg.), Dr. Lala Ram, Dr. Mahesh Chaudhary and Dr. Jitendra Kumar deliberated on the different aspects of agriculture as per their expertise. About 600 farmers and farm women attended the programme and 500 kits were distributed to the SC farmers under SC sub plan scheme of ICAR.

Farmers'-Scientist Interaction Programme at KVK, Ajmer

The KVK, Ajmer organized 2 days Farmers'- Scientist Interaction Programme from 29-30 July, 2021 with special emphasis on promotion of IFS model. The main objective of the interaction programme was to exchange views and experiences directly with the farmers on different problems in agriculture and allied sectors with special emphasis on Integrated Farming System (IFS). About 27 progressive farmers from Ajmer district participated in this programme.

Activities	No. of programmes	No. of farmers (A)	No. of Extension Personnel (B)	TOTAL (A+B)
Advisory Services	416	10,400	50	10866
Diagnostic visits	22	182	25	229
Field Day and Kishan mela	47	6560	85	6692

Exhibition	09	9400	70	9479
Kisan Ghosthi	22	970	40	1032
Film Show	52	2300	110	2462
Scientists' visit to farmers field	385	5055	56	5496
Method Demonstrations	06	200	07	213
Celebration of important days	75	4000	180	4255
Exposure visits	09	456	10	475
Self -help groups	4	60	-	64
Plant/animal health camps	3	250	10	263
Farmers visit at KVK	410	6500	250	7160
Total	**1460**	**46,333**	**893**	**48686**

H. Mobile app

- The Directorate of Extension Education, SKNAU, Jobner launched Mobile Apps developed by all the Krishi Vigyan Kendras under the jurisdiction area of SKNAU, Jobner to provide technical information to the farming community. More than 3000 farmers downloaded the mobile app of KVKs, apart from this KVKs of SKNAU issued more than 400 advisories through mobile app, different social media group and ICAR developed platform.

Facilities updated during the year (Conference hall /laboratories & equipment/ EL Unit/water harvesting structure/ major farm machinery/ implements/sports facilities/ farm development/ seed processing unit etc):

- **KVK, Ajmer:** A unit of 10 KWp Grid connected SPV Power Plant has been installed at roof top of KVK building. Apart from this a dry fodder storage unit, covered thrashing floor by iron shed, honey-bee rearing unit and existing Mushroom production unit also extended.
- **KVK, Fatehpur :** Conference hall of KVK equipped with new furniture and developed farm elevated road.
- **KVK, Alwar:** Training Hall of 200 seating capacity, established Agricultural Machinery bank, farm Pond size 30 m x 15 m, construction of new tube well and established new orchards (kinnow, lime, Guava, Sapota and bael).
- **KVK, Dholpur :** Established bee keeping demo unit
- **KVK, Kotputli :** Water harvesting structure, seed processing unit, poultry shed and farm equipments i.e. water tankar 5000 liter capacity, hydraulic trolley, groundnut seed drill and dry fodder cleaner.
- **KVK, Bharatpur :** 450 meter chain link fencing at KVK farm, PTZ CCTV Camera and established Kinnow orchard.
- **ATIC, Jobner :** Tractor, Solar water pump at farm pond, and established kinnow, fig, mosambi, papaya, custard apple, mango and sahjan orchard.

6. SIGNIFICANT EVENTS, ACHIEVEMENTS AND DEVELOPMENTS

During the year, several important developmental activities and events were organized at the University headquarter, constituent colleges, research stations etc. of the University. An account of significant events that took place during the reporting year is as follows:

I. Activities & Events

1. Platinum Jubilee Year of SKN College of Agriculture, Jobner:

Sri Karan Narendra College of Agriculture, Jobner has touched its 75-year milestone this year. This college was established by Rawal Narendra Singhji in the year 1947 and made significant strides in the field of agricultural education since then. Different programmes, events and activities were organized in the college. A brief list of all such activities is given below.

i) 76th Foundation day of SKN College of Agriculture

76th Foundation day of SKN College of Agriculture, Jobner was organized on 07.07.2021 in Extension Theater, SKNCOA, Jobner in the presence of Hon'ble Vice Chancellor, Dr. J.S. Sandhu, Thakur Sab Dr. Sangram Singh, Dean & FC Dr. A.K. Gupta, all Dean's and Directors and Staff members on the occasion of college establishment. The SKN College of Agriculture, Jobner was established in the year 1947. The college has entered in 75th year & therefore curtain raising of the platinum Jubilee year was done virtually on 17.07.2021 in the gracious presence of Hon'ble Governor Sh. Kalraj Mishra, Hon'ble Chief Minister Sh. Ashok Gehlot, Hon'ble Agriculture Minster Sh. Lalchand Kataria, Hon'ble DG, ICAR, New Delhi Dr. Trilochan Mohapatra, and Hon'ble Vice Chancellor, SKNAU, Jobner Prof. J.S Sandhu. Lokarpan of the water harvesting structure (Jwala Sagar) having water storage capacity of about 11 crore litre was done by the dignitaries.

Hon'ble Governor and Hon'ble Chief Minister GOR, on 76th University Foundation Day

ii) Felicitation of Ex-Deans of SKNCOA, Jobner

As is said "Reach the heights but do not forget the roots." Prof. A. K. Gupta, Dean & FC informed that SKN College of Agriculture will reconnect, commemorate and honour the efforts of all the people, who contributed immensely in building this institution for last 74 years. In this direction, a felicitation programme for Ex-Deans of SKNCOA, Jobner was organised on 9 August, 2021 under the Chairmanship of Prof. J.S Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner. Dr. P.C. Jain, Former Dean, SKNCOA, Jobner was the chief guest of the function. All the former Deans of SKNCOA, Jobner, Dr. P.C. Jain, Dr. N.L. Meena, Dr. R.A. Singhania, Dr. G.L. Keshwa, Dr.

Hon'ble Dias in the Felicitation Programme

Ex-Deans in the Felicitation Programme

S.N. Sharma, Dr. R.C. Kumawat and Dr. G.S. Bangarwa shared their working experiences and guided in determining the future paths. All the dignitaries were felicitated by Hon'ble Vice Chancellor on this occasion.

iii) Felicitation of Retired Teachers of SKNAU on Teacher's day

SKNAU celebrated this year's Teachers' day with all the retired teachers of this University, which in turn doubled the joy of Platinum Jubilee Celebration. Dr. D.L. Singhania, the senior-most retired faculty was the Chief Guest of the function and Prof. J. S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner presided over the function. All the former professors were welcomed and felicitated by Hon'ble Vice Chancellor. Dr. A.K. Gupta, Dean & FC, in his inaugural address highlighted the college achievements and appreciated the efforts of all the teaching members amid COVID-19 crisis. Former professors also shared their reminiscences and thanked SKN family for organizing such event.

Hon'ble Dias on teacher's day celebration

Retired faculty of SKNAU, Jobner

iv) Felicitation of Retired Non-Teaching Faculty of SKNCOA, Jobner

In the series of Platinum Jubilee Year celebration of SKNCOA, Jobner a felicitation programme of retired non-teaching staff was organized on 17 June, 2022 under the Chairmanship of Hon'ble Vice Chancellor, SKNAU, Jobner Prof. J. S. Sandhu. Sh. Mevaram Jat, Joint Secretary, Finance Department was the Chief Guest and Prof. A. K. Gupta, Dean & Faculty Chairman was the Special Guest in the event. Former faculties shared their memories and acknowledged SKN family's sincere efforts in arranging such a beautiful event. At the end, all the guests of the event were honored with shawl and flowers.

2. Celebration of Foundation day of SKNAU, Jobner

SKNAU celebrated its 9th foundation day on 13 September, 2021 with full joy and zeal. Hon'ble Vice Chancellor, SKNAU, Jobner, Prof. J.S. Sandhu welcomed the Chief Guests Dr. R.C. Agarwal, DDG, Education, ICAR, New Delhi and Dr. N.S. Rathore, Hon'ble Vice Chancellor, MPUAT, Udaipur; and the Distinguished Guests Dr. B. R. Chhipa, Former Vice-Chancellor of S.K. Rajasthan Agriculture University; Bikaner, Dr. P.S. Rathore, Former Vice-Chancellor, SKNAU, Jobner and Dr. G.L. Keshwa, Former Vice-Chancellor, Agriculture University, Kota. On this occasion, all the dignitaries appreciated the ongoing efforts at the University and addressed the SKNAU family with their inspiring words.

Former Vice Chancellors of SKNAU, Jobner

Felicitation of Prof. N.S. Rathore on Foundation Day

3. Organization of Karonda Day

To encourage the Karonda growers of Rajasthan, SKN Agriculture University, Jobner celebrated the Karonda day on 30 August.2021 at RARI, Durgapura, Jaipur. Padam Bhushan Dr. R. S. Paroda, EX-DG, ICAR, New Delhi and Chairman, TAAS was the chief guest and Dr. L. S. Rathore, EX- Director, IMD, was the special guest in the occasion. Prof. J. S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner apprised that Karonda, is a rich source of iron and Vitamin C and its mature fruit contain high amount of pectin. Scientists from constituent colleges, ARSS and KVK'sof SKN Agriculture University, Jobner were present during the occasion. Farmer's from the different zone of Rajasthan state participated and displayed various local race of Karonda and their seedlings. Best karonda grower award from different zones and district were also given to the farmers. A exhibition was organized for the farmers on this occasion, in which more than 100 entries were received from all eight jurisdiction districts of the University. Dignitaries distributed 18 prizes to the Karonda growers in different categories.

Visit of Dr. R.S. Paroda at Karonda Exhibition Stall

Memento distribution at Karonda day celebration

4. Distribution of Medicinal and Aromatic Plants (MAPs)

To propagate awareness among farmers about the importance of medicinal and aromatic plants and embark ahead towards the Government's mission of Swasthya Rajasthan-Harit Rajasthan, Ghar-Ghar Aushdhi Yojana was organized at SKN Agriculture University, Jobner on 17 August, 2022. Hon'ble Vice Chancellor, Prof. J. S. Sandhu apprised that a Herbal park has been maintained at Department of Plant Breeding and Genetics, SKNCOA, Jobner, under RKVY Scheme, in which saplings of MAPs will be prepared and distributed to the farmers at free of cost. 700 plants of Tulsi and Giloy were distributed to the farmers of nearby villages of Jobner on this occasion and total 5000 medicinal plants including Kalmegh, Ashwagandha etc. will be distributed to the farmers in due course. Similar programme was also organized at RARI, Durgapura on 30 August, 2021.

5. Virtual classroom visited by the Chancellor & Governor of Rajasthan

The virtual classroom setup was visited by Hon'ble Governor, Rajasthan Shri Kal Raj Ji Mishra on 23rd March, 2022 where he interacted with the UG/PG students regarding the benefits of virtual classroom setup. He also virtually interacted with the UG students from COA, Lalsot. He was very pleased to see such advanced setup of classroom established in the college and praised the efforts of the University towards online teaching. Hon'ble Governor, Rajasthan Shri Kal Raj Ji Mishra also visited onion seed production trial of PG student of SKNCOA, Jobner, water harvesting structures and planted Guggal plant (Medicinal plant) in the biodiversity park.

6. Celebration of 75th Independence Day

The 75th Independence Day, Azadika Amrit Mahotsav was celebrated at all the units of the University with great patriotic fervor. The celebration commenced with hoisting of the National Flag by the Hon'ble Vice Chancellor of SKNAU, Jobner, Prof. J.S. Sandhu at the University campus, followed by the NCC parade. Similarly, all the University heads and unit incharges hoisted the National Flag at their respective centres. On this occasion, Hon'ble Vice Chancellor also inaugurated the farm pond at Rajasthan Agricultural Research Institute, Durgapura. The celebration was attended by the students and staff of the University.

Significant Developments

1. University Park in Raj Bhawan, Jaipur

SKNAU, Jobner has established a University Park in the Raj Bhawan, Jaipur. The University has developed Integrated Farming System module in this University Park. Under this IFS module, a net house covered with insect proof net and equipped with fully automized drip irrigation system in nutritional garden, vermicompost unit, azolla unit has been developed at Rajbhawan, Jaipur. These University park was inaugurated on 22 September, 2021 by Sh. Kalraj Mishra, Hon'ble Governor of Rajasthan in the presence of Prof. J. S. Sandhu., Hon'ble Vice Chancellor, SKNAU, Jobner. Prof. Sandhu briefed about the importance, benefits and uses of vermicompost, azolla and fully automized drip irrigation system.

University and Govt. officials at Raj Bhawan, Jaipur

His Excellency Sh. Kalraj Mishra, Hon'ble Governor, GOR inaugurating University Park

2. Land allotment to the new colleges:

a. **COA, Jhilai:** Land allotment sanctioned for college by GOR, Joint Secretary/Revenue (Group-3) dept vide letter No.F.06(221) Revenue-3/21 dt: 16-08-21.

b. **COA, Bharatpur:** 06 ha land allotment to COA, Kumher, Bharatpur from the office of District Collector, Bharatpur.

c. **COA, Kishangarhbas, Alwar:** 27.58 ha land has been allotted and registered in favour of and demarcation work of 3.5 ha land is in progress.

d. **COA, Navgaon:** 30 ha. land at Village Manki allotted to College of Agriculture, Navgaon by District Collector, Alwar vide letter no. 1161 dated 22.02.2022.

e. **COA, Bhusawar:** 13.77 ha land allotted in Govt. Kalmi Bag Nursery, Bhusawar and 16.23 ha in village Sandhali by Govt. of Rajasthan.

3. Digi-Locker

The National Academic Depository (NAD) is a 24X7 online repository of all academic awards such as certificates, diplomas, degrees, mark sheets, etc. lodged by Academic Institutions, such as universities, colleges, research institutes, training academies and secondary education boards and stored in a digital format. DigiLocker NAD not only allows easy access to and retrieval of academic awards but also validates and guarantees their authenticity and safe storage. SKNAU has been registered as a service provider and 891 degree certificates of UG, PG and Ph.D. for the session 2021 has been uploaded on Digi-locker portal.

4. AGRI-DIKSHA Virtual Classroom

ICAR - IASRI has envisioned establishing Agri-DIKSHA and Virtual Classrooms in Agricultural Universities (AU) to strengthen agricultural education through ICT interventions under NAHEP- Resilient Agricultural Education System (RAES) through a centralized deployment at Krishi Megh. As a part Virtual Classrooms has been established in our university also which is 'Blended Learning Method' that combines online and in-person teaching/learning. Upon setting up of Virtual Classroom in our University,

it encourages us to recording/broadcasting of at least four to five hours of virtual lessons every working day which will also have to be uploaded onto the central server for archiving and dissemination of knowledge. The Central Recording & webcasting software is pre-installed in the provided Virtual Classroom hardware connected to Krishi Megh at ICAR-IASRI and is being monitored by the higher authorities.

5. Expansion and Renovation of Saraswati Bhawan, SKNCOA, Jobner

The expansion and renovation work of Saraswati Bhawan, SKN College of Agriculture, Jobner has been done during the reporting year. The renovation work included the expansion of the Bhawan, modification of stage, construction of green rooms with attached toilets, construction of toilet block for audience, installation of wall paneling, installation of false ceiling, installation of air conditioners in the Bhawan, renovation of windows, doors, provision of access for disabled persons etc. Further the chairs and sofas will be installed in the Bhawan to provide sitting facility in the Bhawan.

6. Gautam Transit Hostel

A Gautam Transit Hostel of 25 bed capacity was inaugurated at SKNAU Jobner by Hon'ble Vice Chancellor Prof. J.S. Sandhu and Dr. P. C. Jain, former Dean, SKNCOA, Jobner on 09 August, 2021. Dr. A. K. Gupta, Dean & FC informed that this hostel is named after Dr. Lotu Singh Gautam, the first Dean of SKNCOA, Jobner and is earmarked for visitor students.

Inauguration of Gautam Transit Hostel by Dr. P. C. Jain

7. Establishment of Weed Museum

Weed Museum established in the Division of Agronomy at Rajasthan Agricultural Research Institute, Durgapura, Jaipur was inaugurated by Dr. R.S. Paroda, Former Director General, ICAR and Prof. J.S. Sandhu, Hon'ble Vice-Chancellor, SKN Agriculture University, Jobner on 30 August, 2021. The other dignitaries present during the inaugural ceremony were Dr. L.S. Rathore, Former Director, IMD, Pune. This "Weed Museum" is the first of its kind in the Rajasthan state and 100 preserved weed samples (Annual, Biennial and Perennial) of major kharif and Rabi crops of Zone IIIa are exhibited in the Weed Museum. The posters showing the photographs of different parts of the weeds and their basic information along with the weed seed samples and related literature.

Inauguration of Weed Museum by Dr. R. S. Paroda

8. Foundation stone of Boundary wall at COA & KVK, Kotputli

Foundation stone of Boundary wall of COA, Kotputli (Pathredi) laid down on 20 February, 2022 in the gracious presence of Shri Rajendra Singh Yadav, Hon'ble State Minister of Higher Education, Planning, Home, Motor garage, Justice & Library, GoR and Prof. Jeet Singh Sandhu, Hon'ble Vice Chancellor, SKN Agriculture University, Jobner. The dignitaries' also inaugurated Farm pond and Animal unit at KVK, Kotputli on the same day.

9. Foundation Stone of College Campus Boundary Wall, COA, Kishangarhbas, Alwar

The foundation stone for the College Campus boundary wall, College of Agriculture, Kishangarhbas, Alwar was laid by Sh. Deep Chand Khairya, Hon'ble MLA, Kishangarhbas and Vice Chairman, Rajasthan Kishan Aayog in the auspicious presence of Dr. A. K. Gupta, Dean & Faculty Chairman, SKNCOA, Jobner and Dr. R. Sammauria, Dean, COA, Kishangarhbas on 21st May, 2022. The ceremony was attended Sh. B. P. Suman, Pradhan, Panchyat Samiti, Kishangarhbas, Sh. Atual Agre, Deputy Superintendent, Kishangarhbas, Dr. Priti Nayer, Principle, GLM COA, Kishangarhbas, Sh. Sukhiram, Principle, Govt. Sr. Sec. School, Kishangarhbas and other several dignitaries.

10. Establishments of Bio agents Production Unit

The Bio agents Production Unit in the Department of Entomology and Department of Plant Pathology, SKNCOA, Jobner, established in the year 2021. Since its inception, the unit is producing a number of bio-agents and bio-pesticides viz., *Trichograma chilonis, Beauveria bassiana, Metarhizium anisopliae* and *Trichoderma harzianum* at mass scale. Initially the unit was established with the financial support of ICAR, under experiential Unit learning scheme under READY Programme. The bio-agents and bio-pesticides are being produced as per requisitions of University research stations/KVKs etc. The unit is committed to reduce the pesticide load in environment and to suffice the requirement of organic agriculture in the region.

11. Centre of Excellence on Applications of Artificial Intelligence in Agriculture

The Department of Agricultural Engineering, SKN College of Agriculture, Jobner has received RKVY research project on "Centre of Excellence on Applications of Artificial Intelligence in Agriculture" for three years from 2021-22. The objectives of the research project are to establish the experiential learning laboratory for Artificial Intelligence in Agriculture at SKNCOA, Jobner. For this purpose, two drones have been procured, of which one will be used for agricultural spraying of chemicals, nutrients and broadcasting of granular seeds, fertilizers etc. and another will be used for surveying and mapping of field, crop yield monitoring, crop health analysis etc. For surveying and mapping, three cameras *viz.*, multispectral camera, RGB camera and thermal camera have also been procured so that aerial photographs at different wavelengths can be captured. The procured drone was inaugurated by the Hon'ble Chief Minister of Rajasthan Sh. Ashok Gehlot Ji during Agri-Expo-2022 on 28th March, 2022.

12. Water Harvesting Structure

On the concept of "Catch the Rain", water harvesting ponds has been developed at main campus of the University as well as constituent units of the University. Lokarpan of the water harvesting structure (Jwala Sagar) having water storage capacity of about 11 crore litre was done virtually on 17.07.2021 by the Hon'ble Governor Sh. Kalraj Mishra and Hon'ble Chief Minister Sh. Ashok Gehlot in the gracious presence of Hon'ble Agriculture Minster Sh. Lal Chand Kataria, Hon'ble DG, ICAR, New Delhi Dr. Trilochan Mahapatra, and Hon'ble Vice Chancellor, SKNAU, Jobner Prof. J.S Sandhu. The capacity of Hurdia Pond, a Water harvesting structure located at Macchar Khani, Jobner was enhanced from 2.5 crore litre to 5 Crore litre by digging it deeper. This pond is an unlined water harvesting structure, which has been revamped under the World Bank funded project IDP-NAHEP, SKNAU, Jobner. The collected water in this pond will be used for irrigation purpose to conduct various research experiments in the

college. The nearby catchment area of the pond was also cleaned to make it more accessible. Similarly, a new water harvesting structure of 1.20 crore has been excavated at College of Agriculture, Lalsot under NAHEP. A water havesting pond of 42 lakhs litre capacity was made at Rajasthan Agricultural Research Institute, Durgapura. This farm pond was inaugurated by the Hon'ble Vice Chancellor, SKN Agriculture University, Jobner on 15 August, 2021.

13. Electricity Production from Solar Energy – A step towards "Go Green"

Solar panels are a great way to offset energy costs, reduce the environmental impact and provide a host of other benefits, such as supporting local businesses and contributing to energy independence. Under the aegis of Institutional Development Plan of NAHEP, SKNAU, Jobner, solar power of plants of total capacity 375 kW are being installed at the campus of SKNCOA, Jobner and College of Agriculture, Lalsot. Out of total 375 kW capacity, 295 kW is being installed at SKNCOA, Jobner which includes Pal Hostel, PG Hostel, Raman Hostel (130 kW), Bhabha Hostel (55 kW), Girls Hostel (55 kW) and New Girls Hostel (55 kW). At College of Agriculture, Lalsot, 80 kW capacity solar plant has been installed on the administrative building of the college. The solar panels of 122 KW power have also been installed at Rajasthan Agricultural Research Institute, Durgapura, which is generating 12000- 15000 units per months. The solar panel of 10 kW capacity has been installed at KVK, Ajmer. Thus, a total of 507 kW capacity of solar panels are being installed at different units of the University during this year. The installation of these solar power pannels will greatly reduce the dependence of the institutes of the University on the traditional electricity and will help to reduce the electricity bills.

Solar Panels installed at SKNAU, Jobner

14. Establishment of Mushroom Unit

Demonstration unit on oyster and button mushroom was established at Rajasthan Agricultural Research Institute, Durgapura for hand-on training on mushroom for youth, women, farmer labour etc. This unit aims at imparting practical knowledge about mushroom production as well as income generation.

15. Establishment of Molecular Lab

Under ICAR-All India Network Project on Soil Arthropod Pests a molecular laboratory has been setup in the Division of Entomology, Rajasthan Agricultural Research Institute, Durgapura. The this laboratory is being utilized to study diversity in species of whitegrub, termite, cutworm etc. and other soil arthropod pests for management of soil arthropod pests.

16. Skill Development center

The skill Development center was developed at SKN Agriculture University, Jobner to organize training programmes for capacity building of scientists, students and rural youth. This center has been developed under RKVY scheme with worth of Rs. 154.50 lakhs.

17. Plantation

Landscape Cell of SKNAU, Jobner is actively engaged in organizing plantation activities in and around the

campus of Sri Karan Narendra Agriculture University. Under its drive of "Green Campus and Clean Campus", total 27691 plants were planted in SKNAU campus and its adopted villages in the year 2021-22 through various programmes like Van Mahotsav, Massive Plantation Drive. About 11641 plants were planted in the adopted village of the University as well as KVKs in the reporting year.

In addition to this, Landscape cell bags the credit of establishing Bio-Diversity Park at the University Head Quarters. More than 150 plant species i.e, fruit tree, medicinal plants. Shrubs, herbs and climbers have been planted in this bio-diversity park. Plants brought from all over the country can be seen here, beauty of which mesmerizes visitors of the University. Hon'ble Chancellor, Sri Karan Narendra Agriculture University, Jobner and Governor of Rajasthan, Shri Kalraj Mishra, planted a "Guggul" plant in Bio-Diversity Park on 23rd March, 2022 on the occasion of International Conference on Plant Pathology: Retrospect and Prospects. Hon'ble Chief Minister of Rajasthan Government Shri Ashok Gehlot also planted a "Peelu" plant in Bio-Diversity Park on 28th, March 2022 on the occasion of Agri-Expo-2022, SKNAU, Jobner.

Mass Plantation Drive at SKNAU, Jobner

18. Establishment of the University nursery

A nursery has been established in the University campus, from where farmers, departments and visitors can avail quality planting material of various plants at feasible rates. During the year 2021-2022, about six to seven thousand plants of different species were prepared, due to which 70-80 thousand rupees were saved. Different species of plants were provided to the different departments of the college and units.

19. Establishment of Hydroponics Unit

One Hydroponics Unit has been established in Department of Horticulture, SKN College of Agriculture, Jobner, during the January 2022. It is "a frame type" Hydroponics unit, which is fully automation and sensor based. Area of this unit is 50 square feet (10 feet length and 5 feet width). Currently, high value exotic salad vegetable crops like lettuce, celery, parsley, mint, basali etc., are being grown in this unit. It is a typical hydroponics unit facilitates a micro-climate and helps in solving problems of space, water, nutrients and less labor and produces higher yields. Even higher quality food can be produced without soil with better management in these types of units.

20. Establishment of Vertical Garden

Department of Horticulture, SKN College of Agriculture, Jobner has set a vertical garden along its boundary wall for the demonstration purpose. The hanged pots in this vertical garden mostly contain ornamental and leafy plants. These gardens help in reducing the carbon footprint of a building by filtering pollutants and carbon dioxide out of the air.

21. Automatic Milk Pouch Packing Machine

An Automatic Milk Pouch Packing Machine was established at University Dairy Management Unit, Jobner and inaugurated by Hon'ble Vice Chancellor on 25 November, 2021. This machine can pack 25 pouches in one minute. This machine will reduce the chances of adulteration, infection and save the time and labour in the packing of milk. It will also help the women self-help groups and entreprenures to market their products by packing them here.

Inauguration of Automatic Milk Pouch Packing Machine

22. Academic Management System (AMS)

The 9 constituents and 11 private affiliated colleges along with 3365 students and 193 faculties have registered under Academic Management System (AMS) for SKNAU Jobner. Various academic processes of the university have been automated through diverse set of sub-modules of AMS namely; Courses Management, Student Management, Faculty Management, Administration Management E-Learning and Online fee collection etc., which has enhanced the efficiency of the system by saving time and efforts involved in manual processes.

23. University Website

Approximately 1 million hits have been received on University Website during 2021-22. All the important events, news, circulars, tenders and others information were uploaded regularly.

24. E-Governance Portals

The center is regularly utilizing the e-governance portals like Rajasthan State Public Procurement Portal (SPPP) for uploading all NIB and Bids above 1.00 lac, Sampark Portal for Grievance Redressal, e-proc portal for e-tendering, Government e-Market place (GEM) for procurement.

25. Agricultural Experts Information System

It is the premier database of profiles of scientists / researchers and other faculty members working at leading academic institutions and other R & D organization involved in teaching and research in Agriculture sector across India. The database would be instrumental in selection of panels of experts for various committees, taskforce, established by the Agriculture Ministries/State departments establishments for monitoring and evaluation purposes. In this connection Sri Karan Narendra Agriculture University, Jobner has initiated to develop its faculty database through AEIS Portal. The profile URL created has also been updated on university website www.sknau.ac.in. The profile can be updated periodically as and when required by the scientist.

Awards/ Recognition to the Constituent Units and Staff

A. Constituent Units

- AICRP on Pearlmillet RARI Durgapura awarded with Certification of Appreciation for significant performance in Zone A during 2021-22 from ICAR, New Delhi on 02-03 March, 2022.
- KVK Ajmer bagged the Best Krishi Vigyan Kendra award by the District Collector, Ajmer on the occasion of Independence Day 2021 for its outstanding extension activities in the Ajmer district and surrounding areas. The KVK helped the farmers in the areas of crop selection, understanding the basics of IFS model with cattle and goat farming, poultry farming, quail farming, rabbit farming, beekeeping, mushroom cultivation, pearl cultivation, farm pond, nursery raising and others.
- College of Agriculture, Fatehpur received District Green Champion award in the presence of Sh. Avichal Chaturvedi, IAS, District Collector, Sikar from Mahatma Gandhi National Council of Rural Education, Department of Higher Education, Ministry of Education, Govt. of India on 10.08.2021.
- College of Agriculture, Navgaon received first prize in "State Level Karonda Fruit Competition" at RARI, Durgapura on 30.09.2021 on the occasion of Karonda Day celebration.

B. University Staff

- Dr. A. K. Gupta, Professor and Dean, SKNCOA, Jobner and Dr. L.R. Yadav, Professor & Head and Associate Dean were awarded fellow of Indian Society of Agronomy for the year 2018 & 2020, respectively in the fifth International Agronomy Congress held at PJTSAU, Hyderabad during 23-27, November, 2021 for their outstanding contribution in the discipline of Agronomy.
- Dr. B. L. Kakraliya, Professor (Plant Physiology) & Director (HRD), SKNAU, Jobner has been elected as Vice-President of Indian Society of Plant Physiology for the year 2022-23.
- Dr. L. D. Sharma, Professor (Plant Breeding & Genetics), RARI, Durgapura received Appreciation Certificate for outstanding contribution on 26th January 2022 from Director, RARI, Durgapura.
- Dr. L. D. Sharma, Professor (Plant Breeding & Genetics), RARI, Durgapura received Best Millet Researcher Award in National Seminar Cum Exhibition on Promotion, Value Addition, and Export of Millet and Millet Products at RARI, Durgapura, SKNAU, Jobner, during 7-8 May, 2022.
- Dr. Udai Bhan Singh, Dean, COA, Bharatpur was honoured & conferred with a certificate by Alliance Club International, Bharatpur on the eve of Teacher day on 05 Sep., 2021.
- Dr. S. Godika received "Reviewer's Excellence Award" by ARCC Journals on 27 Jan., 2022.
- Dr. A. C. Shivran, Dean, CDS&T, Jobner, Dr. S. P. Singh, Associate Professor (Horticulture), SKNCOA, Jobner, Dr. Hanuman Singh Jatav, Asst. Prof, Soil Science, COA, Fatehpur received appreciation certificate by Hon'ble Vice Chancellor on the occasion of Independence Day 2021.
- Dr. Shailesh Godika, Professor & Dean, COA, Navgaon received Best poster award by Central Zone, IPS Society, New Delhi, 23-26 March, 2022 at SKNAU, Jobner.
- Dr. Upendra Singh, Incharge, Department of Agriculture Engineering received "SBSRD Fellowship Award 2021" from the Society of Biological Sciences and Rural Development (SBSRD), Allahabad for his outstanding contribution in the field of Agricultural Engineering on the occasion 7th Dr. Gopal Pandey Memorial Lecture Function held on 27.07. 2021.
- Dr. M. R. Yadav, Assistant Professor (Agronomy), RARI, Durgapura awarded with "Young Scientist Award

in Agronomy" by Center for Professional Advancement Continuous Education (CPACE) on the occasion of National Teacher's Day.

- Dr. Sheela Kharkwal, Asstt. Professor (Agriculture Economics), SKN College of Agriculture, Jobner received 'Young Women Scientist Award' at 3rd International Conference on "Global Initiatives in Agricultural, Forestry and Applied Sciences Conference (GIAFAS)-2021 organized by Agricultural & Environmental Technology Development Society (AETDS), U.S. Nagar, Uttarakhand, India.
- Dr. Dewa Ram Bajya, Assistant Professor (Entomology), COA, Peethampuri awarded as Reviewer Excellence Award as reviewer of Agricultural Science Digest, ARCC journal.
- Dr. Varsha Kumari, Assistant Professor, Department of Plant Breeding and Genetics, S.K.N. College of Agriculture, Jobner was awarded "Excellent Reviewer Award" by Agricultural Research Communication Centre (ARCC) Journal.
- Best article award received by Dr. Varsha Kumari for her technical article entitled "Hybrid Rice Seed Production" from Agriculture & Food e-Newsletter on 07.03.2022.
- Dr. Rahul Kumar, Assistant Professor (Soil Science), COA, Bhusawar received Best Article award on 05.03.2022 for Article published in Agricultural & Food E- Newsletter -September 2021.
- Dr. Rahul Kumar, Assistant Professor (Soil Science), COA, Bhusawar received Best Innovative article of the month on 02.08.2021 for Article published in Vigyan Varta October, 2021.
- Dr. Rahul Kumar, Assistant Professor (Soil Science), COA, Bhusawar received most impactful article of the Month on 30.09.2021 for Article published in Vigyan Varta September, 2021.
- Mrs. Pinki Sharma received Best Poster Award by Indian Phyto-pathological Society (IPS) in 8th International Conference at SKN Agriculture University, Jobner during March 23-26, 2022.
- Dr. S. K. Goyal received Best Poster Award By Indian Phyto-pathological Society (IPS) in 8th International Conference at SKN Agriculture University, Jobner during March 23-26, 2022.
- Mr. Girdhari Lal Kumawat, Assistant Professor & Jr. Pathologist, ICAR-AICRP on Spices received Young Scientist Award Samagra Vikas Welfare Society (SVWS), at a National Webinar "Transformation of Farmers, Agriculture & Allied Sector" on 27 July, 2021 for excellent contributing in the field of agriculture & allied sector.
- Mr. Girdhari Lal Kumawat, Assistant Professor & Jr. Pathologist, ICAR-AICRP on Spices received Best Poster Paper Award for Research paper entitled "Management of powdery mildew (*Erysiphe polygoni* DC.) and Aphid (*Hydaphiscori andri* Das) in coriander" in Management of Biotic and Abiotic Stresses, Session (Online) presented in the 9th Indian Horticulture Congress-2021, held at Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, Uttar Pradesh from 18-21 November 2021.
- Mr. Girdhari Lal Kumawat, Assistant Professor & Jr. Pathologist, ICAR-AICRP on Spices received Best Poster Presentation Award for Research paper presentation on "Management of blight, powdery mildew and aphid infestation in cumin (Cuminumcyminum L.)" authored by G.L. Kumawat, A. C. Shivran, D. K. Gothwal, Jitendra Singh, S. S. Punia and G. K. Mittal in IPSCONF-2022 held at SKNAU, Jobner during 23-26 March, 2022.
- Dr. R. P. Ghasolia received Best Oral Presentation Award for Best research paper and orally presentation in 8th International Conference organized by IPS, New Delhi at SKNAU, Jobner during 23-26 March, 2022.
- Dr. S. P. Bishnoi, Assistant Professor (Nematology) and Dr. Hemraj, Assistant Professor (Nematology),

RARI, Durgapura received Best poster award at National University, Jaipur, Rajasthan.

- Dr. S. P. Bishnoi, Assistant Professor (Nematology) and Dr. Hemraj, Assistant Professor (Nematology), RARI, Durgapura received Best poster award in International Conference IPSCONF-2022 Sri Karan Narendra Agriculture University, Jobner during 23-26 March, 2022.
- Dr. Pratibha Singh, Associate Professor (Soil science), RARI, Durgapura received Best Oral Presentation Award in Regional Conference on Prioritization of Crop-Specific Technologies for Sustainable Profitability: The Uttar Pradesh Chapter' organized at ICAR- IISR, Lucknow, UP during 29-30 April, 2022.
- Dr. Shweta Gupta, Assistant Professor (Agronomy) received Appreciation certificate on Republic day-2022 from Director, RARI, Durgapura.
- Dr. Pratibha Singh, Associate Professor (Soil science), Dr. Shweta Gupta, Assistant Professor (Agronomy, Dr. Seema Sharma, Associate Professor (Agronomy) and Dr. O.P. Meena, Associate Professor (Agronomy) received Best Oral Presentation award in International Conference on "Recent Advances for Managing Sustainable Soil Health & Crop Production", Organized by GKV Society, Agra during February, 18-20, 2022.
- Dr. N. C. Pant, Dr. U. B. Singh and Dr. V. S. Meena, COA, Bharatpur received Best Article Award "Nutritional Interventions to Muddle through COVID-19 Pandemic" For the Article in Agriculture & Food: e-Newsletter Volume 03, Issue 09. (Article Id: 10706).
- Dr. Ved PrakashYadav, Assistant Professor (Plant Breeding & Genetics), COA, Basedi received Research Excellence Award- 2022 on 28 February, 2022 from Ratna Prasad Multidiscilinary Research & Education Society, Vijaywada, Andhra Pradesh.
- Dr. Laxman Prasad Balai, Assistant Professor (Plant Pathology), COA, Kishangarhbas received Young Scientist Award for outstanding contribution in the field of plant pathology on the occasion of International web conference on innovative and current advances in Agriculture & allied science during 19-21 July, 2021.
- Dr. Laxman Prasad Balai, Assistant Professor (Plant Pathology), COA, Kishangarhbas received Excellence in Extension Award Outstanding contribution in the field of plant pathology on the occasion of International web conference on Global Research Initiatives for sustainable Agriculture & allied science during 13-15 December 2021.
- Dr. Laxman Prasad Balai, Assistant Professor (Plant Pathology), COA, Kishangarhbas received Certificate of Appreciation Significant contribution in strengthening of NSS activities on the occasion of the 73rd Republic Day on India.
- Dr. D. S. Bhati was conferred with Appreciation Certificate & Best Worker Award on 26 January, 2022 by District Administration, Ajmer.
- Dr. Hemraj Gurjar, received "The Best Scientist Award" by Agricultural Technology Development Society, Ghaziabad, UP and also secured first rank with Dr. S.P. Bishnoi, Dr. B. S. Chandrawat & Dr. Vishnu Gurjar in Poster presentation in the 5th International conference on "Advance in Smart Agriculture and Biodiversity Conservation for Sustainable Development (SABCD-2022)" organized by ATDS from 04 - 06 March, 2022.
- Dr. Hanuman Singh Jatav, Asst. Prof. (SSAC) has received appreciation certificate under the theme of "Beat Covid Campaign" from Mahatma Gandhi National Council of Rural Education, Hyderabad.
- Dr. Basant Kumar Bhinchhar awarded distinguished scientist award at 3rd International Conference on

"Global Initiatives in Agricultural, Forestry and Applied Sciences Conference (GIAFAS)-2021 organized by Agricultural & Environmental Technology Development Society (AETDS), U.S. Nagar, Uttarakhand, India.

- Dr. Pratibha Singh, Asst. Professor, received best Poster Presentation Award during National Seminar on ''Sustainable Food Production Systems for Self-Reliant and Climate Resilient Agriculture" from 16 to 18 June, 2022 at University of Agricultural Sciences, Dharwad

MoUs Signed:

Inorder to improve the quality of research for students and to collaborate in academic and extension area that is mutually beneficial to both the organization, the SKNAU, Jobner inked MoUs with the following organizations during reporting period.

1. Sri Karan Narendra Agriculture University, Jobner- Jaipur and CSIR-CEERI, Pilani- 22.07.2021: This MoU is based on the principal of reciprocity and expresses the interest of both institutions in exchanging scholars, students, academics information and material in the belief that the research and educational process at both institutions will be enhanced and that mutual understanding between their respective scholars and students will be increased by the establishment of such exchange programme as per CSIR guidelines.
2. Sri Karan Narendra Agriculture University, Jobner- Jaipur and Jagannath University, Jaipur- 23.07.2021: The MoU has been done for academic and research exchange between both the Universities.
3. Sri Karan Narendra Agriculture University, Jobner- Jaipur and Maharshi Arvind University, Jaipur - 23.07.2021: The MoU has been done for academic and research exchange between both the Universities.
4. Sri Karan Narendra Agriculture University, Jobner- Jaipur and Career Point University, Kota- 12.08.2021 : The MoU has been done for academic and research exchange between for the University.
5. Sri Karan Narendra Agriculture University, Jobner- Jaipur and ICAR, New Delhi- 18.08.2021: Conducting Research through all in Coordinated Research Project (AICRP's) /Revolving from scheme and any there such scheme funded/sanctioned by the Council.
6. Sri Karan Narendra Agriculture University, Jobner- Jaipur and University of Technology, Vatika, Jaipur- 01.09.2021: The MoU has been done for academic and research exchange between for the University.
7. ARS, Navgaon (SKN Agriculture University, Jobner) and ICAR-Directorate of Rapeseed-mustard Research, Bharatpur - 24.09.2021: To use expertise as scientific manpower of ICAR-DRMR, Bharatpur and land and other inputs available in ARS, Navgaon for quality seed production.
8. Sri Karan Narendra Agriculture University, Jobner- Jaipur and CSWRI, Avikanagar- 03.01.2022: To develop co-operation and collaboration in research for development particularly in Animal Nutrition, Animal Breeding and Genetics, Livestock Production and Management and other agreed activities.
9. Sri Karan Narendra Agriculture University, Jobner- Jaipur and One Life foundation, New Delhi- 07.01.2022: For commercialization of biofortified hybrid Pearlmillet RHB 234.
10. Sri Karan Narendra Agriculture University, Jobner- Jaipur and National Institute of Ayurveda, Jaipur 24.01.2022: To build up academic research capacity and promote mutual understanding between the research establishments at the institute as well as for technical support to research.

11. Krishi Vigyan Kendra, Kotputli, Jaipur-II (SKN Agriculture University, Jobner) and Barmalt Malting (India) Private Limited, Village Keshwana Rajput, Tehsil Kotputli, Jaipur.- 20.02.2022: For introduction of new malting barley varieties, on-farm testing and frontline demonstrations of high yielding varieties of 2-row malting barley developed by the ICAR- Indian Institute of Wheat & Barley Research, Karnal or RARI, Durgapura for establishing production potential on the farmer's fields and accordingly promote cultivation of high yielding malting barley varieties in this region.
12. Sri Karan Narendra Agriculture University, Jobner- Jaipur and South Asia Biotechnology Centre, Jodhpur- 23.03.2022: To establish mutual relation between the scientific and technical divisions and creation of facilities for exchange of scientific, technology and experts for their proper placement.
13. Sri Karan Narendra Agriculture University, Jobner- Jaipur and Dhanuka Agritech Limited- 24.03.2022: To impart skill training to the student protection provide fellowship to the PG & Ph.D. should is conduction of bio-efficacy trials and use drone in agriculture & DAL sponsored research for developing diversified sustainable farming system.
14. SKNAU, Jobner and The Alliance of Bioversity International and CIAT-PUSA Campus, New-Delhi - 26.03.2022: For developing long term strategies and plan of scout, document and recognize grassroots innovators agri-biodiversity innovators of grassroots farmer to address their local needs, health, poverty and nutritional security.
15. Sri Karan Narendra Agriculture University, Jobner- Jaipur and Indian Red Cross Society, Delhi & Rajasthan state Red Cross Society, Jaipur- 20.04.2022: To collaborate for objectives like building the resilience of communities to disaster and climate change, strong emphasis on disaster risk management on natural, manmade related environmental technological and health hazards and risk and preventing new risk, reducing existing risk and strengthening resilience.

MoU with Indian Red Cross Society,

16. Sri Karan Narendra Agriculture University, Jobner- Jaipur and ICAR- National Bureau of Plant Genetic Resources, New Delhi- 12.05.2022: To facilitate academic research related to the thesis requirement of the research students and scientists of the ICAR institutes as recommended by the its Director for guiding students, research instrumentation and library facilities made available to the faculty and research scholars and exchange of students for academic, research and training purposes.

Visit of Dignitaries

1. Dr. L. N. Sharma, Assistant Director (IPM), Durgapura visited Department of Entomology, SKNCOA, Jobner on 22 July, 2021.
2. Sh. Deep Chand Khairiya, MLA, Kishangarhbas visited College of Agriculture, Kishangarhbas on 15 August, 2021.

- Ambassadors from Argentina Embassy visited research experiments at RARI, Durgapura on 24 August, 2021.
- Sh. Yogendra Kumar, Marketing Director, IFFCO, New Delhi along with the IFFCO officers Sh. Kisan Singh, State Marketing Head, Rajasthan and Dr. A. P. Singh, Manager, Agricultural Services, Rajasthan visited RARI, Durgapura on 27 August, 2021.

- Padam Bhushan Dr. R. S. Paroda, EX-DG, ICAR, New Delhi and Chairman, TASK and Dr. L. S. Rathore, EX- Director General, IMD, New Delhi visited RARI, Durgapura on 30 August, 2021 and inaugurated the Weed Museum and visited the research experiments conducted at RARI, Durgapura.
- Prof. J.S. Sandhu, Hon'ble Vice-Chancellor, SKNAU, Jobner, visited field experiments at RARI, Durgapura during Kharif, 2021 under different AICRP's and Adhoc projects on 29 & 30 August, 2021
- Dr. P.C. Panchariya, Director of CSIR- Central Electronics Engineering Research Institute (CEERI), Pilani visited RARI and discussed the possibility of integration approach of agriculture and electrical engineering research.
- Dr. N.S. Rathore, Hon'ble Vice Chancellor, MPUAT, Udaipur, Dr. P.S. Rathore, Hon'ble Ex-Vice Chancellor, SKNAU, Jobner, Dr. G. L. Keshwa, Hon'ble Ex-Vice Chancellor, AU, Kota and Dr. B. R. Chippa Hon'ble Ex-Vice Chancellor, SKRAU, Bikaner visited SKNAU, Jobner on the auspicious occasion of 9th foundation day of SKN Agriculture University on 13 September, 2021.
- Dr. V. P. Chahal, ADG (Extension), ICAR visited KVK, Bharatpur and reviewed the KVK activities on 14 September, 2021.
- Sh. Prashant Bairwa, MLA visited College of Agriculture, Jhilai on 22September, 2021.
- Sh. Rajendra Singh Yadav, Hon'ble Minister of Planning, Motor Garage and Social Justice visited College of Agriculture, Kotputli on 29September,2021.
- Dr. J. S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner visited KVK, Navgaon on 30 September, 2021.
- Lt. Col. Bhawani Singh, Commanding Officer of 1st Rajasthan NCC Battalion, Jaipur inspected NCC unit at SKN Collage of Agriculture on 1 October, 2021.
- Dr. D. B. Ahuja, Ex-Director, NCIPM, New Delhi visited SKNCOA, Jobner on 4 October, 2021.
- Prof. J. S. Sandhu, Hon'ble Vice Chancellor visited at COA, Jhilai on 06 October, 2021.
- Sh. Divyanshi Didwaniya, IAS, member NITI Aayog New Delhi visited COA Baseri on 7 October, 2021.
- Dr. S.K. Singh, Director ICAR-ATARI, Jodhpur visited KVK, Ajmer on 16 October, 2021.
- Sh. Himanshu Gupta, District Magistrate, Bharatpur and Sh. Malik, Commissioner, Horticulture visited COA, Bhusawar on 12 November, 2021 for the purpose of site selection for the college.
- Dr. K. N. Ojha, Ex-Director, HRD and Professor Entomology, AU, Kota visited Honey bee demonstration Unit and Department of Entomology, SKNCOA, Jobner on 20 November, 2021
- Dr. ArunTomar, Director, CSWRI, Avikanagar, Sh. Murari Lal Sharma, ADM, Tonk, Sh. R. K. Khandelwal Deputy Director Agriculture, Tonk, Prof. J. S. Sandhu, Hon'ble Vice chancellor and Dr. Khemraj Sharma Ex- DFO, Jaipur visited COA, Jhilai on 15 December, 2021.
- Dr. K. K. Pathak, IAS, Secretary Rural Development Department, Jaipur and Sh. Surendra Singh Rathore, CEO, Biofuel Authority and Team of Rural Development visited SKN Collage of Agriculture, Jobner on 16 December, 2021.
- Dr. Baldeo Singh, Ex. Joint Director (Ext.) IARI, New Delhi visited the SKN College of Agriculture, Jobner on 27 December, 2021.
- Prof. J. S. Sandhu, Hon'ble Vice chancellor visited KVK, Navgaon & COA, Navgaon on 29 December, 2021.

- Dr. O. P. Yadav, Director, ICAR- Central Arid Zone Research Institute (CAZRI), Jodhpur and Dr. Amresh Chandra, Director, ICAR-Indian Grassland and Fodder Research Institute (IGFRI), Jhansi visited SKN Agriculture University, Jobner on 5 January, 2022.
- Sh. Lal Chand Katariya, Hon'ble Agriculture Minister (GoR) visited Bio Diversity Park, Honey Bee demonstration unit and water harvesting structures at SKN Agriculture University, Jobner on 6 January, 2022.
- Prof. B. V. S. Sisodia, NAAS Fellow, ICAR, New Delhi visited Department of Statistics, SKN College of Agriculture Jobner on 6 January, 2022.
- Mr. Umesh Tyagi (Crop specialist) and Mr. Sukhwinder Singh Brar (Commercial manager), Bayer India Ltd. visited Experiential Learning Unit "Mass Production of Bio-agents and Bio-pesticides at SKN College of Agriculture, Jobner on 22 January, 2022.
- Mr. Umesh Tyagi (Crop specialist) and Mr. Sukhwinder Singh Brar Commercial Manager Bayer India Ltd. Experiential Learning Unit "Mass Production of Bio-agents and Bio-pesticides" at SKN College of Agriculture, Jobner on 22January,2022
- Prof. J. S. Sandhu, Hon'ble Vice-Chancellor, SKNAU, Jobner visited KVK, Ajmer on 25 January,2022.
- QRT team Dr. S.S. Bagga, Chairperson, Dr. V.V. Singh, member secretary and Dr. D.M. Hegde and Dr. H.C. Sharma, Members of QRT team reviewed the research activities of AICRP on Taramira, SKN College of Agriculture, Jobner on 12 February, 2022.
- Dr. S.K. Singh, Director, ATARI, Jodhpur (Rajasthan) visited KVK, Navgaon on 16 February, 2022.
- Prof. J. S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner visited COA, ARS and KVK, Fatehpur on 18 February, 2022.
- Dr. S.K. Singh, Director, ICAR-ATARI, Jodhpur visited KVK Ajmer & ARSS, Ajmer on 19 February, 2022.
- Sh. Rajendra Yadav, State Minister Govt. of Rajasthan, Prof. J. S. Sandhu, Vice Chancellor and Dr. Sudesh Kumar, Director Extension, SKNAU, Jobner and Lt. Col. S. B. Singh, Quarter Master, 105 Infantry Bn (TA) Rajputana Rifles visited KVK, Gonera-Kotputli on 20 February, 2022.
- Prof. J. S Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner and Dr. A. K. Gupta, Dean & Faculty Chairman, SKNCOA, Jobner visited COA, Basedi and COA, Bharatpur on 23 February, 2022.
- Dr. Subrata Dutta, Co-founder, India Millet Initiative, New Delhi visited KVK, Navgaon on 23 February, 2022.
- Prof. J. S Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner visited COA, Lalsot and KVK, Dausa on 25 February, 2022.
- Dr. Pankaj Sharma, Dr. Arun Kumar, Dr. H.K. Sharma and Dr. R.L. Choudhary, DRMR, Bharatpur, monitoring team of AICRP on Taramira visited at SKNCOA, Jobner on 26 February, 2022.
- Padam Bhushan Dr. R. S. Paroda, Ex-DG ICAR, Dr. A. K. Singh, DDG (Extn.), ICAR, Dr. J.S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner, Sh. Ansh Deep, District Collector, Ajmer, Dr. S.K. Singh, Director, ICAR-ATARI, Jodhpur, Dr. B. L. Chippa, Ex-VC, SKRAU, Bikaner and Dr. Sudesh Kumar, DEE, SKNAU, Jobner visited and participated in Kisan Mela organized by KVK, Ajmer on 05 March, 2022.
- Dr. A.K. Singh, DDG (Extn.) visited SKNAU, Jobner on 05 March, 2022 and RARI, Durgapura on 06 March, 2022.

- Dr. R. C. Agrawal, DDG (Education) & National Director, ICAR, New Delhi visited SKNAU, Jobner on 06 March, 2022 for monitor and discuss about the progress of developments under NAHEP & DS grant and also review the functioning virtual class room.
- Smt. Jaskaur Meena, Hon'ble MP, Dausa and Dr. Veena Gupta, Head, GS, NBPGR, New Delhi visited KVK, Dausa on 08 March, 2022 on the occasion of International Women's Day.
- Dr. Satyaveer Singh, Principal Scientist (Social Science), ICAR-IIWBR, Karnal, Haryana visited KVK, Alwar on dated 08 March, 2022.
- Sh. Sushil Kumar, IAS & CEO visited COA, Bharatpur & delivered a motivational lecture to the students on 11 March, 2022.
- Sh. Kailash Choudhary, Union State Minister for Agriculture and Farmers' Welfare Sh. Bhagirath Choudhary, MP Ajmer, Sh. Suresh Singh Rawat, MLA Pushkar, Sh. Ramswaroop Lampa, MLA Nasirabad, Dr. A.K. Tomar, Director ICAR-CSWRI, Avikanagar, Dr. S.N. Saxena, Director ICAR-NRCSS, Ajmer visited KVK Ajmer on 11 March, 2022 during Kisan Mela at NRCSS, Ajmer.
- Dr. V. P. Chahal, ADG (Agricultural Extension), ICAR visited KVK, Navgaon Alwar on 12 March, 2022.
- His Excellency Governor of Rajasthan Sh. Kalraj Ji Mishra visited on 23 March, 2022 in the inaugural function of International conference "Plant Pathology: Retrospect and Prospects". He also visited field experiment of M.Sc. Students and Virtual Class Room at SKN Collage of Agriculture, Jobner.
- Dr. C. D. Mayee, Former Chairman, ASRB (ICAR) and Agriculture Commissioner Govt. of India, Dr. B. L. Jalani, Former DOR, CCSHAU, Hisar and Dr. Rakesh Pandey, President, Indian Phyto-pathological Society and Emeritus Scientist, CIMAP, Luckhnow, UP, India participated as guest of honour in International Conference on "Plant Pathology: Retrospect and Prospects" at SKNAU, Jobner on 23 March, 2022.
- Dr. B.L. Jalani, Former DOR, CCSHAU, Hisar attended the valedictory function of International Conference on "Plant Pathology: Retrospect and Prospects" from 23 - 26 March, 2022.
- Sh. Rajendra Singh Yadav, Hon'ble State Minister of Higher education, Planning, Home, Motor Garage, Justice & Library, GoR visited COA farm at Pathredi on 26 March, 2022.
- Hon'ble Chief Minister Shri Ashok Gehlot visited SKN Agriculture University, Jobner on 28 March, 2022 on inaugural function of Agri Expo- 2022.
- Hon'ble Minister of Agriculture, Animal Husbandry and Fisheries, Sh. Lalchand Kataria visited SKN Agriculture University, Jobner on inaugural function of Agri Expo- 2022 on 28 March, 2022.
- Sh. Mahadev Singh Khnadela, Chairman, Kisan Ayog attended inaugural function of Agri Expo-2022 at SKN Agriculture University, Jobner on 28 March, 2022.
- Sh. Babulal Nagar, MLA, Dudu attended inaugural function of Agri Expo-2022 at SKN Agriculture University, Jobner on 28 March, 2022.
- Sh. Khiladi Lal Bairwa, Chairman, SC Commission attended inaugural function of Agri Expo-2022 at SKN Agriculture University, Jobner on 28 March, 2022.
- Sh. Deep Chand Khairiya, MLA, Kishangarhbas attended inaugural function of Agri Expo-2022 at SKN Agriculture University, Jobner on 28 March, 2022.
- Sh. Alok Beniwal, MLA, Shahpura attended inaugural function of Agri Expo-2022 at SKN Agriculture

University, Jobner on 28 March, 2022.

- Sh. Suresh Modi, MLA, Neem Ka Thana attended inaugural function of Agri Expo-2022 at SKN Agriculture University, Jobner on 28 March, 2022.
- Sh. Ram Singh Rao, Chairman, Vanshavali Sarankshan evam Sanvardhan Academy attended inaugural function of Agri Expo- 2022 at SKN Agriculture University, Jobner on 28 March, 2022.
- Sh. Dinesh Kumar, Principal Secretary Agriculture, GOR visited SKN Agriculture University, Jobner on 28 March, 2022 in Agri Expo- 2022.
- Divisional Commissioner, Jaipur and Sh. Vishal Rajan, Collector, Jaipur visited SKN Agriculture University, Jobner on 28 March, 2022 in Agri-Expo-2022.
- Hon'ble MP Dausa Smt Jaskaur Meena visited KVK, Dausa on 26 April, 2022.
- Sh. Sanwar Mal Verma, Divisional Commissioner Bharatpur & Sh. Chetan Chauhan District Collector, Dholpur visited KVK, Dholpur on dated 26 April, 2022.
- Sh. M. L. Meena, DDM NABARD, Sikar, Sh. S.N. Garhwal, PD ATMA, Sikar & Shivram Katariya, Deputy Director SAMETI, Durgapura, Jaipur visited ARS, Fatehpur on 26 April, 2022.
- Dr. S. Ranjan, Ex-Director, ICAR-CISH, Lucknow visited the Department of Horticulture, SKNCOA, Jobner on 25 May, 2022.
- Shri. Mukesh Goyal, BJP Assembly Incharge, Kotputli, Rtd. Dr. Omprakash Khedar, Deptt of Cereals Millets, Jaipur. Dr. Shaitan Singh, Senior Scientist & Head, Chomu-Jaipur-I. Dr. Padam Chand, Dy. Director, Deptt. of Animal, Jaipur and Dr. Ramji Lal Yadav AO, Deptt of Agri., Shahpura also visited at KVK, Gonera, Kotputli dated 23 May, 2022.
- Smt. Shobha Rani (MLA-Dholpur) & Sh. Chetan Chauhan (CEO-Dholpur) visited KVK, Dholpur.
- Prof. (Dr.) U.S. Sharma, Former VC of MPUAT, Udaipur (Raj.) at COA, Baseri.
- Dr. D. J. Patel, Ex. Principal & Dean, B.A. College of Agriculture, Anand Agricultural University, Anand, Gujrat.
- Dr. R.A. Kaushik, Professor and Director Extension MPUAT, Udaipur and Dr. P.K. Yadav Professor (Hort.), SKRAU, Bikaner attended course committee meeting in the Department of Horticulture, SKNCOA, Jobner.
- Dr. Anil Sirohi, IARI, New Delhi monitored the experiments at RARI Durgapura, Jaipur.


कृषि महाविद्यालय

7. CAPACITY BUILDING AND OUTREACH PROGRAMMES

SKN Agriculture University, Jobner organizes winter school/ refresher courses, conference, seminar, workshops and training programmes on key areas of current importance to prepare the scientist, extension functionaries, farmers, farm women, youth and entrepreneurs to cope with new challenges. The University imparts need based trainings on selected thematic areas to stakeholders of SAUs, Department of Agriculture, Horticulture, Animal Husbandry of Government of Rajasthan and entrepreneurs.

I. Organization of Winter school/ Refreshers courses/ Conference/ Seminar/ Trainings

A. Winter/Summer Schools/ refresher courses:

1. A 21- days, IV Orientation Programme for newly recruited Assistant Professors and SMS of SKNAU was organized by Directorate of Human Resource Development, SKNAU, Jobner from 1st to 21st December, 2021 at University headquarter, Jobner. Sixteen Assistant Professors and SMS participated in the orientation programme. The main objective of this orientation programme was to acquaint the newly recruited faculty with the university functioning in Teaching, Research & Extension activities and to inform them about the general service rules and regulations, financial management and other day to day working of University.

Fourth Orientation Programme, SKNAU, Jobner

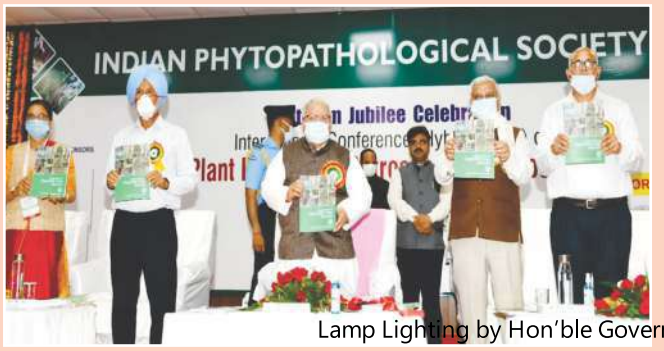
2. A 21-days ICAR Sponsored winter school on “Advance Production Technologies of Underutilized Vegetable Crops under Arid and Semi-arid conditions” organized by Dept. of Horticulture, SKNCOA & Directorate of HRD, SKNAU, Jobner from 21 February to 13 March, 2022. Twenty three participants from different states were participated in the Winter School.

3. A 21-days ICAR Sponsored winter school on “Disease Scenario in Climate Change Conditions - Challenges, Experiences, Innovation and Future Prospects” organized by Dept. of Plant Pathology, SKNCOA & Directorate of HRD, SKNAU, Jobner from 1 to 21 March, 2022. Twenty one participants from seven states were participated in the Winter School.

21-days ICAR Sponsored winter school at SKNAU, Jobner

B. Conference/ Workshop/ Seminar:

1. Organization of International Conference: SKN Agriculture University, Jobner and Indian Phyto-pathological Society, New Delhi jointly organized a Four-days 8th International Conference on "Plant Pathology: Retrospect and Prospects" from 23-26 March, 2022 at SKN Agriculture University, Jobner in Hybrid Mode. Hon'ble Governor of Rajasthan and Chancellor of SKNAU, Jobner, Shri Kalraj Ji Mishra inaugurated this conference. Dr. C. D. Mayee, Former Chairman, ASRB (ICAR) and Agriculture Commissioner Govt. of India, Dr. J. S. Sandhu, Vice Chancellor, SKNAU, Jobner, Dr. Robin Gogoi, Secretary, IPS, different delegates and faculty members of SKNAU, Jobner attended this inaugural session. Approximately, six hundred Scientists/academicians from different countries participated physically as well as online in this conference and participated in the different technical sessions. The conference culminated on 26 March, 2022 under the auspicious presence of Dr. B.L. Jalani, former DOR, CCSHAU, Hisar as Special Guest and Prof. J. S. Sandhu, Hon'ble Vice Chancellor, SKNAU, Jobner as Chairperson of the valedictory function on 26.03.2022.



Lamp Lighting by Hon'ble Governor, I

Conference Compendium release by Hon'ble Dias during conference

Lamp Lighting by Hon'ble Governor, Rajasthan, Sh. Kalraj Ji Mishra

2. A Workshop on "Virtual Classroom Management System" was organized by Dept. of Statistics, Maths & Computer Science, SKNCOA & Directorate of HRD, SKNAU, Jobner on 22 February, 2022. The Workshop was conducted both on physical as well as Virtual mode and Sixty Teachers/Scientists of our university were participated in the workshop. The main objective of this workshop is to acquaint our University Faculty with the Virtual Classroom Management System during this covid-19 period.

Participants and Dignitaries at workshop

3. A one day workshop was organized by Directorate of Education on "Sensitizing Officers of Affiliated Colleges about NEP-2020 and Ensuring Performance Indicators for Renewal of Affiliation" on 30 November, 2021 at SKNAU, Jobner campus.

Hon'ble VC, Deans and Directors, SKNAU, Jobner

4. Organization of National Seminar cum Exhibition: A national seminar cum exhibition on "Promotion, Value addition and Export on Millets and Millet Products" was organized at Rajasthan Agricultural Research Institute, Durgapura during 7-8 May, 2022. About 400 participants including national repute scientists, NGO workers and policy planners actively participated in the programme. Several stalls displayed the value added products prepared from millets were exhibited to create awareness about the dietary benefits of millets among the residents of Jaipur city.

C. Trainings:

1. Two days Training on "Powerful Interviewing Skills: A Key to Dreams Come True" organized by Department of Statistics, Mathematics & Computer Science, SKNCOA, Jobner from 26-27 July, 2021.
2. Training on "Impactful Interviewing Skills" organized by Department of Statistics, Mathematics & Computer Science, SKNCOA, Jobner on 31 July, 2021.
3. A farmer training on 'Improved package of practices of groundnut and its post-harvest management" was conducted at ARSS, Gonera, Kotputli on 17 August, 2021.
4. A farmer's seminar on Kharif Onion Production Technology and Plant Protection organized on 28 September, 2021 at ARS & COA, Navgoan in collaboration with PI Industries Ltd. and 200 farmers participated.
5. An International Virtual Workshop on "Soil Carbon for Sustainable Crop Production and Soil Health Management, 2021" was organized by IDP-NAHEP and Dept. of Soil Sci. & Agril. Chemistry, SKN College of Agriculture, Jobner from 4-5 October, 2021 with 300 attendees.
6. A five day training on "Dairy farming and value added milk product" was organized by National Commission of Women, New Delhi held at Department of LPM, SKN College of Agriculture, Jobner from 25-29 October, 2021. In this 20 women of Jaipur district were benefited.
7. A 26 days training on "Data Analysis using Statistical Softwares" was organized by Department of Statistics, Mathematics & Computer Science, SKN College of Agriculture, Jobner from 4 to 30 October, 2021. This is a paid training and 14 M.Sc. & Ph.D. students of the College were participated.
8. A five-days training on Dairy farming and value added milk product was organized at department of LPM from 25 to 29 October, 2021. The training was sponsored by National Commission of Women, New Delhi. The training on Dairy farming and value added milk product was imparted to 20 women of Jaipur district. Lectures on milk and value added milk products and practical sessions were delivered by experts. Various milk products like paneer, flavoured milk, shrikhand, dahi and whey based products were prepared by the participants. Participants were given away certificates by Hon'ble Vice-Chancellor, SKNAU, Jobner.
9. One day institutional training on Management of dairy animals was organized by COA, Lalsot under ECF Scheme on 30 October, 2021.
10. A 12 weeks certificate course on pesticide management was organized at COA, Bharatpur from 13 November, 2021 to 12 February, 2022, 40 input dealers were attended.
11. Two days training programme organized by RARI, Durgapura to educate and create awareness for growing nematode free Nursery, of Guava at Excellence centre of guava, at-Devara-Ka- Bass (Tonk).
12. One day Farmers Training organized on Arid Fruits at Aasalpur farm, under SC-SP plan, Department of Horticulture (AICRP on AZF), SKN College of Agriculture, Jobner on 24 January, 2022
13. One day farmer training on "Operation and maintenance of automation unit in drip irrigation system" was organized at SKNCOA, Jobner on 4 February, 2022 and 26 farmers were benefitted.

14. Two days National Seminar cum Exhibition on Promotion, Value Addition and Export of Pearl millet at RARI, Durgapura from May 7-8, 2022 organized by SKNAU and IMI, New Delhi.
15. 4th Foundation Course on "Basics of Computer and Internet" was organized by Department of Statistics, Mathematics & Computer Science, SKN Collage of Agriculture, Jobner from 23-28 May, 2022.
16. Trainings on "Mushroom Cultivation: Two hands on trainings on mushroom cultivation to farmers, rural/urban youth were organized during 2021-22 at RARI, Durgapura. During the trainings about 107 participants, which includes farmer, unemployed youth, farm labor, farm women, students, agriculture graduates, retired government officials, etc. were benefitted.

D. IDP-NAHEP organized One Week Offline Entrepreneurship Short Course/Training for Undergraduate Students

IDP-NAHEP aims to improve students' agripreneurship potential to make them job provider instead of job seeker. IDP - NAHEP conducted eleven one-week offline entrepreneurship short courses on diverse themes (mentioned above) for undergraduate students to develop specialization in the specific field with progressive farmers/farm/industrial exposure visit nearby Jaipur for undergraduates students and distributed topic wise training manuals and participation certificates to student for future references.

S. No.	Activities	Training Period	Total No. of participants
1.	Entrepreneurship in Bee Keeping	15th to 20th November, 2021	27
2.	Entrepreneurship in Mushroom Cultivation	23rd to 27th November, 2021	27
3.	Entrepreneurship skill Development in Value Added Milk Products	29rd November to 04th December, 2021	30
4.	Entrepreneurship Development Through Hi-Tech Nursery Management	8th to18th, December 2021	33
5.	Plant Tissue Culture & Micropropagation	13th to 22th December, 2021	24
6.	Entrepreneurial Short Course Training Series #6 "Poultry Farming: Source of Regular Income"	11th to 18th January, 2022	29
7.	Entrepreneurial Short Course Training Series #7 "Entrepreneurship Development Through Organic Farming"	14th to 23th, February, 2022	38
8.	Entrepreneurial Short Course Training Series #8 "Micro Irrigation"	09th to 16th March, 2022	28
9.	Entrepreneurial Short Course Training Series #1 "Entrepreneurship Development Through Trichoderma Production for Plant Diseases Management"	18th to 23th April, 2022	24
10.	Entrepreneurial Short Course Training Series #2 "Entrepreneurship Development Through Landscaping and Ornamental Gardening"	7th to 13th May, 2022	23
11.	Entrepreneurial Short Course Training Series #3 "Soil and water sampling & Testing"	20th to 25th June, 2022	21

II. Participation of scientists in Conferences/ Symposiums/ Seminars/ Workshops/ Winter School/ Refreshers Courses/Trainings:

A. Participation of scientists in Conferences/ Symposiums/ Seminars/ Workshops:

- Dr. Sudesh Kumar, Director, DEE, Dr. B. L. Jat, KVK, Dausa, Dr. S. S. Shekhawat, KVK, Kotputli, Dr. S. C. Yadav, KVK, Navgaon, Dr. R. K. Dular, KVK, Bharatpur, Dr. Harphool Singh, KVK, Fatehpur, Dr. Navab Singh, KVK, Dholpur, Dr. D. S. Bhati, KVK, Ajmer attended 3 days "Annual Zonal Review workshop" from 01-03 July, 2021 organized by ICAR-ATARI, Jodhpur.
- Dr. S.S. Punia, Assoc. Prof. & Head, Dr. Deepak Gupta, Asstt. Prof. and Dr. Manohar Ram, Asst. Prof., Department of Plant Breeding and Genetics, SKNCOA, Jobner participated in "International Webinar-cum-Workshop on Seed Testing according to ISTA Standards" organized by Division of Seed Science and Technology, ICAR-IARI New Delhi from 06 - 09 July, 2021 on online mode.
- Dr. Pratibha Manohar, Asst. Professor (Maths), SKNCOA, Jobner attended Workshop on "Application of numerical methods for medical sciences & engineering" organized by Swarnim Institute of Technology, Gandhinagar from 24-25 August, 2021.
- Dr. M.K. Sharma, Asst. Prof. (Ag. Statistics), SKNCOA, Jobner participated in three day's workshop on "Response Surface Methodology" organized by ICAR-NAARM, Hyderabad from 24- 26 August, 2021.
- Dr. Rajhans Verma, Assistant Professor attended National workshop "Soil and Plant Health for Sustainable Agriculture" organized by Surendrkaur Memorial Agriculture College, Padampur, Sriganganagar, Rajasthan during 26-27 August, 2021 on online mode.
- Dr. Pratibha Manohar, Asstt. Professor (Maths), SKNCOA, Jobner participatedin 2 days National Conference on "Recent Trends in Mathematical Modeling, Simulation Methods, Computations & Physical Sciences" organized by Hislop College, Nagpur from 8-9 September, 2021.
- Dr. D. K. Gothwal, Professor (PBG) & Dean, College of Agriculture, Peethampuri, Dr. S. S. Punia, Assoc. Prof. (PBG), Dr. A. C. Shivran, Prof. (Agron.) and Sh G. L. Kumawat, Asstt. Prof. (Pl. Pathology), SKNCOA, Jobner attended XXXII Annual Workshop of AICRP on Spices at IISR, Kozhikode, Kerala from 22-24 September, 2021 on virtual mode.
- Dr. Jogendra Singh, Asstt. Prof., RARI, Durgapura attended two days "Groundnut Breeders Meet" jointly organized by ICAR-Directorate of Groundnut Research and Junagarh Agriculture University, Junagarh held at JAU, Junagarh from 23-24 September, 2021.
- Dr. Rajhans Verma, Asstt. Professor (Soil science), SKNCOA, Jobner attended International web conference on "Environment Science and Technology Management" organized by Institute of Engineering and Technology, Department of Agriculture and Department of Business Management, Mangalyatan University, Aligardh, U.P. from 23-24 September, 2021 on online mode.
- Dr. Akhter Hussain, Dr. S.L. Sharma and Dr. R. K. Meena, SKNCOA, Jobner attended International webinar on "Biological control" organized by NIPHM, Hyderabad on 24 September, 2021.
- Dr. Sheela Kharkwal, Asstt. Prof. (Ag. Eco.), SKNCOA, Jobner attended national workshop on "Meta-sentiment-bibliometric analysis using 'R" organized by Commacad (virtual) from 27-29 September, 2021.
- Dr. Akhter Hussain, Dr. S.L. Sharma and S. K. Sharma attended International Virtual Workshop on "Soil Carbon for Sustainable Crop Production and Soil Health Management" from 04-05 October, 2021

organized by SKNAU, Jobner.

- Dr. Pratibha Manohar, Asstt. Professor (Maths), SKNCOA, Jobner attended 2 days National Conference on "New Trends in Applied Mathematics (NCNTAM) 2021" organized by Department of Mathematics, University Institute of Engineering & Technology (U.I.E.T.), Chhatrapati Shahu Ji Maharaj University, Kanpur from 11-12 October, 2021.
- Dr. M.R. Choudhary, Prof. (Hort.), Dr. D.K. Yadav, Prof. (Hort.), Dr. Deepak Gupta, Asstt. Professor (PBG), Dr. Pinki Sharma, Asstt. Professor (Pl. Patho.) and Dr. Manisha Sharma, Asstt. Professor (Entomology), SKNCOA, Jobner attended Annual Workshop on AINP on Onion and Garlic from 12-13 Oct, 2021 on virtual mode.
- Dr. Sheela Kharkwal, Asstt. Prof. (Ag. Eco.), SKNCOA, Jobner and Dr. B.K. Bhinchhar, SMS (LPM) KVK, Kumher attended two days 3rd International Conference on "Global Initiatives in Agricultural Forestry and Applied Sciences" (GIAFAS-2021) organized by Agricultural & Environmental Technology Development Society (AETDS), U.S. Nagar, Uttarakhand, India from 17-18 October, 2021.
- Dr. Chiranjeev Kumawat, Asstt. Professor (Soil Science), SKNCOA, Jobner attended two days online global symposium on "Salt-affected Soils-GSAS21" organized by FAO of the UN from 20-22 October, 2021.
- Dr Pratibha Manohar, Asstt. Professor (Maths), SKNCOA, Jobner attended three days 27th International Conference on "Mathematical and Computational Optimization" organized by International Academy of Physical Sciences (IAP S) from 26-28 October, 2021.
- Dr. G. L. Kumawat, Assistant Professor (Plant pathology), SKNCOA, Jobner attended International Conference on "Saffron and seed spices" organized by Sher-e-Kashmir University of Agri. Sciences & Tech., Srinager (J&K) from 7-8 November, 2021.
- Dr. A.K. Gupta, Prof. and Dean, SKNCOA, Jobner attended two days International webinar on Fostering Global Collaboration among Agricultural Higher Education Institutions organized by NAARM & Education Division, ICAR, New Delhi from 8-9 November, 2021.
- Dr Renu Kumari Gupta, SMS, KVK, Kotputli, Dr. Akshay Chittora, KVK, Dausa and Dr. Lala Ram, KVK, Fatehpur attended 2 days' "Workshop on CFLD on Pulses under NFSM" from 9-10 November, 2021 organized by ICAR-ATARI, Jodhpur.
- Dr. L. N. Bairwa, Prof. (Hort.), Dr. S. P. Singh, Assoc. Prof. (Hort.), Dr. K. K. Meena, Assoc. Prof. (Hort.), Dr. S.K. Bairwa, Asst. Prof. (Hort.) and Dr. G. L. Kumawat, Asstt. Professor (Plant Pathology) participated in 9th Horticulture Congress at Kanpur from 18-21 November, 2021 and presented poster.
- Dr. R. K. Dular, Dr. Basant Kumar Bhinchhar, KVK, Bharatpur, Dr. B. L. Jat, Dr. R. L. Meena, KVK, Dausa attended one day "Workshop on Status, Challenges and Prospects of Livestock especially for small and marginal farmers" on 20 November, 2021 organized by ICAR-CSWRI, Avikanagar, Tonk.
- Dr Pratibha Manohar, Dr. M. K. Sharma and S. K. Sharma Asstt. Professor (Maths), SKNCOA, Jobner attended national Workshop on "Modern Mathematical Methods and High-Performance Computing in Science and Engineering" organized by Anand International College of Engineering, India from 23-24 November, 2021.
- Dr. A.K. Gupta, Prof. and Dean, SKNCOA, Jobner, Dr. L. R. Yadav, Professor (Agronomy), Dr. R. K. Dullar,

KVK, Bharatpur and Dr. Priyanka Kumawat, Assistant Professor (Agronomy), SKNCOA, Jobner attended five days Fifth International Agronomy Congress on "Agri. Innovations to combat Food and Nutrition Challenges" organized by Indian Society of Agronomy at Prof. Jayashankar Telangana State Agricultural University, Hyderabad from 23-27 November, 2021.

- Dr. S. K. Sharma, Asstt. Professor (Computer Science), SKNCOA, Jobner attended National workshop on "FDP on Computing with MATLAB and LATEX Software: Indispensable Tools for Researchers" organized by Baba Farid College, Bhatinda, India, Mizan-Tepi University, Ethopia and MathTech Thinking Foundation, India from 5-11 January, 2022.
- Dr. Sudesh Kumar, Director, DEE, Dr. R. K. Dular, KVK, Bharatpur, Dr. B. L. Jat, KVK, Dausa attended 2 days "workshop on State Level Work Plan-2022" from 07-08 January 2022 organized by ICAR-ATARI, Jodhpur.
- Dr. Akhter Hussain, Dr. S.K. Khinchi and Dr. S.L. Sharma Department of Entomology, SKNCOA, Jobner attended one day National Conference on "Beekeeping" organized by NAFED, TRIFED & National Dairy Development Board's (NDDB) on 24 January, 2022.
- Dr. Pratibha Manohar and S. K. Sharma, Asstt. Professor (Maths), SKNCOA, Jobner attended International Workshop on "Machine Learning & Its Applications" organized by Indira Gandhi National Tribal University, Amarkantak, Madhya Pradesh from 24-28 January, 2022.
- Dr. Pratibha Singh, Asstt. Professor (Soil Science), RARI, Durgapura participated in oral paper presentation in International Conference on "Recent Advances for Managing Sustainable Soil Health and Crop Production" during February 18-20, 2022.
- Dr. Manoj Kumar Sharma, Associate Professor (Plant Physiology), SKNCOA, Jobner attended three days 5th International conference on "Advances in smart agriculture and biodiversity conservation for sustainable development (SABCD-2022)" organized by Agricultural Technology Development Society (ATDS) Ghaziabad, UP, Jaipur National University, Jaipur, Rajasthan from 4-6 March, 2022.
- Dr. D. K. Gothwal, Professor (PBG) & Dean, College of Agriculture, Peethampuri, Dr. R.K. Meena, Associate Professor (Entomology), Dr. S. L. Sharma, Asstt. Professor (Entomology), Dr. Suman Choudhary, Asstt. Professor (Entomology), Dr. Manisha Sharma, Asst. Professor (Entomolgy), Dr. Chiranjeev Kumawat, Asstt. Professor (Soil Science), Dr S.S. Sharma, Asstt. Professor (Soil Science), Pinki Sharma Asstt. Professor (Plant Pathology), Dr. J. Singh, Asstt. Professor (Plant Pathology), Dr. A. K. Meena, Asstt. Professor (Plant Pathology), Dr. S. K. Goyal, Asst. Professor (Plant Pathology), Dr. Manohar Ram, Asstt. Prof. (PBG), Dr. Manoj Kumar Meena, Asstt. Prof. (PBG) and Dr. G.L. Kumawat, Asstt. Prof. (Pl. Pathology), Dr.S.P. Singh, Assoc. Professor (Hort.), Dr. K.K. Meena, Assoc. Professor (Hort.), Dr. D.K. Bairwa, Asstt. Prof. (Entomology) and Dr R.P. Ghasolia, Assoc. Prof. (Pl. Pathology), SKNCOA, Jobner, Dr. Suresh Kumar, Asstt. Professor (Plant Pathology), ARS, Navgaon participated Four-days 8th International Conference (Hybrid Mode) on "Plant Pathology: Retrospect and Prospects" organized by Indian Phyto-pathological Society, New Delhi and SKN Agriculture University, Jobner at SKN Agriculture University, Jobner from 23- 26, March, 2022.
- Dr. Ram Pratap Yadav, SMS, KVK, Kotputli and Dr. Sunita Kumari, KVK, Dausa attended 2 days' "Workshop on CFLD on Oilseeds under NFSM" from 25-26 March 2022 organized by ICAR-ATARI, Jodhpur.

- Dr. Rahul Kumar, Asstt. Professor (Soil Science), COA, Bhusawar attended two days workshop on "Hydroponics Cultivation" organized by NAHEP-IG ICAR, College of Horticulture and Forestry, Jhalawar (Raj.) from 28-29 March, 2022.
- Dr. Pratibha Manohar Asstt. Professor (Maths) and S. K. Sharma, Asstt. Professor (Computer Science), SKNCOA, Jobner attended International Workshop on "Computational Special Functions and Their Applications" organized by MathTech Thinking Foundation, India from 5-7 April, 2022.
- Dr. Ramakant Sharma, Assoc. Prof. (Ext. Edu.), KVK, Tabiji, Ajmer participated an International conference on "Agricultural Development, its challenges and Future Needs" organized by S K Choudhary Education Trust & Krishi Vigyan Kendra, Madhubani, Bihar from 09-11 April, 2022.
- Dr. L.N. Bairwa, Professor & Head (Hort.), Dr. A.K. Soni, Professor (Hort.), Dr. R.P. Ghasolia, Assoc. Prof. (Pl. Patho.), Dr. D.K. Bairwa, Asstt. Prof. (Entomology) and Dr. D.L. Bagri, Asstt. Prof. (Pl. Physiology), SKNCOA, Jobner attended workshop on Annual Group Meet of AICRP on AZF at NDUAT, Faizabad from 28-30 April, 2022.
- Dr. R. L. Meena, Dr. Babita Deegwal, SMS, KVK, Dausa, Dr. Basant Kumar Bhinchhar, SMS, DEE and Dr. D. S. Bhati, KVK, Ajmer attended 2 days "National seminar cum exhibition on promotion, value addition and export of millet product" from 07-08 May 2022 organized at RARI, Durgapura.
- Dr. Sudesh Kumar, Director, DEE, Dr. R. L. Meena, KVK, Dausa, Dr. S. S. Shekhawat, KVK, Kotputli, Dr. S. C. Yadav, KVK, Navgaon, Dr. R. K. Dular, KVK, Bharatpur, Dr. Harphool Singh, KVK, Fatehpur, Dr. Navab Singh, KVK, Dholpur, Dr. D. S. Bhati, KVK, Ajmer, Dr. Basant Kumar Bhinchhar, SMS, DEE and Dr. Mahesh Choudhary, Nodal Officer, KVK, Arnia attended 2 days "XII Biennial National Conference of KVKs" from June 01-02, 2022 organized by Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni Solan (Himachal Pradesh).
- Dr. B. L. Jakhar and Dr. B. N. Sharma, AINP pesticide residue, RARI, Durgapura attended annual workshop through online mode from 20 - 21 June, 2022 at Solan.
- Dr. Pratibha Singh, Asstt. Professor (Soil Science) RARI, Durgapura attended National Seminar on ''Sustainable Food Production Systems for Self-Reliant and Climate Resilient Agriculture" from 16 - 18 June, 2022 at University of Agricultural Sciences, Dharwad.

B. Participation of scientists in Trainings/ Refresher courses/Short Courses:

- Dr. Rajkumar Meena, Asstt. Prof. (LPM) participated in 21 days online national training course on "Opportunities in Agriculture, Animal husbandry & Allied sectors for Sustainable Entrepreneurship & Livelihood Security" organized by RVSKVV, Gwalior from 1- 21 July, 2021.
- Dr. S. S. Sharma, Assistant Professor, Mr. Sonu Jain, Asstt. Professor (Agril. Economics), Dr. Santosh Devi Samota, SMS (Ext.), KVK, Kotputli, Dr. D.S. Bhati, Sr. Scientist cum Head, KVK-Tabiji, Ajmer and Dr. R. N. Sharma, Asstt. Prof. (Plant Pathology), COA, Kumher participated in 21 Days online national refresher course (NRC 2021) on "Reorientation Extension Education and Advisory Services for Sustainable Development of Farming Community, organized by Karnataka Veterinary Animal and Fisheries Sciences University (KVAFSU) Bidar, Karnataka & National Agriculture Development Cooperative Ltd. (NADCL) Baramulla, UT of J & K from 08-28 July, 2021.
- Dr. S. K. Goyal, Asstt. Prof. (Pl. Patho) and Dr. Jitendra Singh, Asstt. Prof. (Pl. Patho) SKNCOA, Jobner attended 21 days training course on "Quarantine Pests: Detection and Identification" organized by

NIPHM, Hyderabad from 07-27 September, 2021 on online mode.

- Dr. S.K. Bairwa, Asstt. Prof. (Hort.) and Dr. D.K. Bairwa, Asstt. Prof. (Ento.) participated 21 days National Refresher Course organized by Karnataka Veterinary Animal and Fisheries Sciences University (KVAFSU) Bidar, Karnataka and National Agriculture from 8-28 September, 2021 on online mode.
- Dr. S.C. Mahala, Asstt. Prof. (Pl. Physiol.), Dr. Mujahid Khan, Asstt. Prof. (Ag. Stat.) and Dr. M. A. Khan, Asst. Prof. (Pl. Patho.), ARS, Fatehpur attended 21 days Refresher Course on "Educational Technology" organized by the Academy of Agricultural Research & Education Management, CCS Haryana Agricultural University, Hisar from 21 September to 11 October, 2021.
- Dr. H. S. Jatav, Asstt. Prof. (Soil Sci.), COA, Fatehpur attended online 26 days training programme on "Basics of Geographical Information System" organized by ISRO- Indian Institute of Remote Sensing, Dehradun from 27 September to 22 October, 2021.
- Dr. S. C. Yadav, Sr. Sci. & Head & Dr. Dilip Singh, Asstt. Prof. (Horti.), KVK, Navgaon, Dr. S. S. Shekhawat, Sr. Sci. & Head, KVK, Kotputli and Dr. R. N. Sharma, Asstt. Prof. (Pl. Patho.), COA, Kumher, Dr. Rahul Kumar, Asstt. Prof. (Soil Science), COA, Bhusawar attended on online 21 days scientific training on "Agriculture Research Methodologies Practices and their Management" Jointly organized by College of Horticulture & Forestry, CAU, Pasighat & Samagra Vikas Welfare Society (SVWS) from 04-24 October, 2021.
- Dr. K.C. Verma, Asstt. Prof. (Agro.), ARS, Fatehpur and Mr. Ramu Meena, Asstt. Prof. (Soil Sci.), ARS, Fatehpur attended 21 days training course on "Plant Health Management Strategies in Different Crops" organized by NIPHM, Hyderabad from 10-30 November, 2021.
- Dr. Dharmendra Tripathi, Asstt. Prof. (Agroforestry), ARS, Fatehpur (Sikar) and Dr. Y.K. Sharma, Asstt. Prof. (Ext. Edu.), COA, Lalsot (Dausa) attended an online 21-days National Training Course on "Entrepreneurship Strategies in Agriculture, Horticulture, Animal Husbandry & Allied Sectors for Economic Development of India" organized by Directorate of Extension Uttar Banga Krishi Vishwavidyalaya, Pundibari (WB) from 21st November-11 December, 2021.
- Dr. S. L. Sharma, Asstt. Prof. (Ento.), Dr. Suman Choudhary, Asstt. Prof. (Ento.), Dr. Manisha Sharma, Asstt. Prof. (Ento.), Dr. J. K. Gupta, Asstt. Professor (Entomology), COA, Kumher, Dr. Anil Meena, Asstt. Prof. (Ento.), ARS, Navgaon, Dr. Dinesh Kachhawa, SMS, Plant Protection, KVK, Dholpur, Dr. Renu Kumari Gupta, SMS, Plant Protection, KVK, Kotputli and Dr. Jitendra Kumar, SMS, Plant Protection, KVK, Fatehpur attended 21 days 4th orientation programme at SKN Agriculture University, Jobner from 1-21 December, 2021.
- Dr. Champa Lal Khatik, Asstt. Prof. (PBG), ARS, Fatehpur attended 21-days training programme on "Plant Protection Techniques for Plant Health Management" organized by NIPHM, Hyderabad from 03rd to 23rdDecember, 2021.
- Dr. Deepak Gupta, Asstt. Prof., (PBG), Dr. Manohar Ram, Asstt. Prof., (PBG), SKNCOA, Jobner and Dr. N.C. Pant, Asstt. Prof., (Biochemistry), COA, Bharatpur attended 21 days ICAR sponsored winter school on "Biofortification of Staple Food Crops Through Conventional and Molecular Approaches'' organized by CCSHAU, Hisar (Haryana) from 3-23 January, 2022.
- Dr. Basant Kumar Bhinchhar, SMS (LPM) KVK, Kumher (Bharatpur), Dr. Sheela Kharkwal, Asstt. Prof. (Agril. Eco.), Dr. Dinesh Kachhawa, SMS (Pl. Protection), KVK, Dholpur, Dr. Santosh Devi Samota, SMS,

Ext., KVK, Kotputli, Jaipur and Dr. Pratibha Singh, Asstt. Prof. (Soil Sci.), RARI-Durgapura attended 21 days ICAR Sponsored Winter School on "Skilling of Rural Youth for Employment Generation in Agriculture" organized by Deptt. of Animal Production, MPUAT, Udaipur from 4th to 24th January, 2022.

- Dr. Jitendra Singh, Asstt. Prof. (Pl. Patho.) & Dr. G. L. Kumawat, Asstt. Prof. (Pl. Patho.) SKNCOA, Jobner, Dr. A. K. Yadav, Asstt. Prof. (Agro.), COA, Kishangarh Bas (Alwar), Dr. Dharmendra Tripathi, Asstt. Prof. (Agroforestry), ARS, Fatehpur and Dr. Ramakant Sharma, Assoc. Prof. (Ext. Edu.), KVK, Ajmer attended 21 days ICAR Sponsored winter school on "Crop diversification with low volume high value seed spices and horticultural crops for doubling farmer's income'' organized by ICAR-NRCSS, Tabiji, Ajmer from 11-31January, 2022.
- Dr. Raj Kumar Meena, Asstt. Prof. (LPM), COA, Bharatpur attended 21days ICAR Sponsored winter school on "Intervention for paradigm shift from Conventional to Modern Approach in Goat Farming: A novel insight for Doubling Farmer's Income" organized by DUVASU at Mathura (U.P.) from 11-31January, 2022.
- Dr. Sweta Singh, Asstt. Prof. (Ag. Engg.), COA, Bharatpur attended 21days ICAR sponsored winter school on "Processing and quality evaluation of functional foods of animal origin" organized by DUVASU at Mathura (U.P.) from 18 January to 07 February, 2022.
- Dr. Ram Kunwar, Asstt. Prof., (PBG), SKNCOA, Jobner attended 21 days ICAR Sponsored winter school on "Conservation and Utilizations of Potential Crops in the Era of Climate Change'' organized by SDAU at Sardarkrushinagar, (Banaskantha) from 18 January to 07 February, 2022.
- Dr. N.K. Barod, Asstt. Prof. (Agro.), COA, Bharatpur attended 21 days ICAR Sponsored winter school on "Advances in Irrigation Technology and Nutrient Management in Arid Horticultural Crops" organized by SKRAU, Bikaner from 20January 09 February, 2022.
- Dr. D. K. Meena, Asstt. Prof. (Ext. Edu.), COA, Bharatpur attended 21days ICAR Sponsored winter school on "Advances in Agricultural Extension" organized by ICAR-NDRI at Karnal from 28 January to 17 February, 2022.
- Dr. Wandkar Sachin Vilas, Asstt. Prof. (Ag. Engg.), SKNCOA, Jobner attended 21 days ICAR sponsored winter school on "Recent Advances in Electronic Devices, Artificial intelligence and Machine Learning for Precision Agriculture'' organized by ICAR-Central Institute of Ag. Engineering at Bhopal from 01-21 February, 2021.
- Dr. R.K. Dular, Sr. Scientist & Head, KVK, Kumher, Dr. Seema Sharma, Assoc. Prof. (Agro.), Dr. Vikash Arya, Asstt. Professor, KVK, Navgaon and Dr. T. K. Jatwa, Asstt.Prof. (Pl. Patho.) RARI, Durgapura, Jaipur attended online 21 days National Refresher Course on "Recent Technologies of Livestock Based Integrated Farming system for Doubling Farmers Income" organized by College of Veterinary Science and Animal Husbandry, Birsa Agricultural University, Ranchi, Jharkhand from 01-21 February, 2022.
- Dr. R.C. Asiwal, Asstt. Prof. (Ag. Eco.) COA, Lalsot (Dausa) and Dr. V.S. Meena, Asstt. Prof. (Ag. Eco.) COA, Bharatpur attended an online 21 days winter school on "Analytical Techniques for Decision Making in Agriculture" organized by ICAR – NIAP, New Delhi from 5 – 25 February, 2022.
- Dr. S. S. Sharma, Asstt. Prof. (Soil Sci. & Ag. Chem.), SKNCOA, Jobner attended 21 days ICAR Sponsored winter school on "Advance Biofertilizer Technologies to Improve Nutrient use Efficiency; Soil health and Greenhouse gas mitigation'' organized by ICAR-IISS at Bhopal from 8-28 February, 2022.

- Dr. S.K. Goyal, Asstt. Prof., (Pl. Pathology), SKNCOA, Jobner, Dr. B.L. Jakhar, Assoc. Prof., (Ento.), Dr. Nitin Chawla, Asstt. Prof., (Pl. Pathology), RARI, Durgapura, Dr. Parvati Deewan, Asstt. Prof., (Agronomy), ARSS, Kotputli and Dr. B.L. Kumhar, Asstt. Prof. (PBG), Directorate of Research, SKNAU, Jobner, Dr. Akshay Chittora, SMS (Hort.), KVK, Dausa, Dr. Dilip Yadav, Asstt. Prof. (Hort.), KVK, Navgaon, Alwar and Dr. Y.K. Meena, SMS (Hort.) KVK, Kotputli (Jaipur) attended 21-days ICAR Sponsored winter school on "Advance Production Technologies of Underutilized Vegetable Crops under Arid and Semi-Arid Conditions" organized by Department of Horticulture, SKNAU at Jobner from 21 February to 13 March, 2022.
- Dr. Hans Ram Mali, SMS, (Agro.), KVK, Navgaon (Alwar), Dr. L.P. Balai, Asstt. Prof. (Pl. Patho.), COA, Kishangarh Bas (Alwar), Dr. Rahul Kumar, Asstt. Prof., (Soil Sci.), COA, Bhusawer (Bharatpur) and Dr. Priyanka Kumawat, Asstt. Prof. (Agro.), SKNCOA, Jobner attended 21-days ICAR Sponsored winter school on "Conservation Agriculture for Efficient Resource Use and Climate-Resilient Farming" to be organized by Division of Agronomy, IARI, New Delhi from 15 February to 07 March, 2022.
- Dr. Upendra Singh, Asstt. Prof. (Ag. Engg.), SKNCOA, Jobner attended 21-days ICAR sponsored winter school on "Renewable Energy Technologies for Agricultural Sector and Rural Industries" organized by BSKKV at Dapoli (MH) from February 15 to 07 March, 2022.
- Dr. M.K. Sharma, Asstt. Prof. (Stat.), Dr. Pratibha Manohar, Asstt. Prof. (Maths) and Dr. S. K. Sharma, Asstt. Prof. (Computer Sci.) SKNCOA, Jobner attended an online 21- days Winter School on "Artificial Intelligence in Agriculture" organized by ICAR – IASRI, New Delhi from 15 February to 7 March, 2022.
- Dr. R.K. Meena, Asstt. Prof. (Soil Sci.), COA, Baseri, (Dholpur) attended 21-days ICAR Sponsored winter school on "Entrepreneurial Development in Agriculture for Sustainable Growth and Self-reliance" organized by RVSKVV, Gwalior from 24 February to 16 March, 2022.
- Dr. Ram Niwas Sharma, Asstt. Prof. (Plant Pathology), COA, Bharatpur, Dr. Suresh Kumar, Asstt. Prof. (Plant Pathology), ARS, Navgaon, Alwar and Mrs. Pinki Sharma, Asstt. Prof. (Plant Pathology), SKNCOA, Jobner, attended 21-days ICAR Sponsored winter school on "Disease Scenario in Climate change conditions- Challenges, Experience, Innovation and Future Prospects" organized by Deptt. of Plant Pathology, SKNCOA, Jobner from 1– 21 March, 2022.
- Dr. N.K. Barod, Asstt. Prof. (Agro.), COA, Bharatpur attended 21-days ICAR sponsored winter school on "Commercial Apiculture for Livelihood Security of Farmers and Unemployed Rural Youth" organized by PAU at Ludhiana (Punjab) from 08th to 28th March, 2022.
- Dr. Parvati Deewan, Asstt. Prof. (Agro.) ARSS, Kotputli, Jaipur attended 21 days ICAR sponsored Winter School on "Advances in Irrigation Technology and Nutrient Management in Arid Horticultural Crops" organized by SKRAU, Bikaner from 8 – 28 March, 2022.
- Dr. Basant Kumar Bhinchhar, SMS (LPM) DEE, SKNAU, Dr. Dinesh Kachhawa, SMS (Plant Protection), KVK, Dholpur and Dr. Santosh Samota, SMS (Ext. Education), KVK, Kotputli attended Winter School on "Skilling of Rural Youth for Employment Generation in Agriculture" during June 04-24, 2022 organized by Department of Animal Production Management, RCA, MPUAT, Udaipur.

C. Participation of scientists in Trainings:

- Dr. A.P. Singh, SMS, KVK, Ajmer attended 06 days training on "Training on programming of web and mobile applications using low code platforms" from July 07-12-2021 organized by NAARM, Hyderabad.

- Dr. S. K. Khinchi, Asstt. Prof. (Ento.) and Dr. Suman Choudhary, Asstt. Prof. (Ento.), SKNCOA, Jobner participated in five-days online training programme on "Production Protocol for Predators and Parasitoids" organized by NIPHM, Hyderabad from 12-16 July, 2021.
- Dr. A.P. Singh, SMS, KVK, Ajmer attended 06 days training on "Resent extension approach for entrepreneurship development in agriculture and allied sector" from July 26-31, 2021 organized by EEI, Anand Gujarat.
- Dr. Sunita Gupta, Director, PM&E, SKNAU, Jobner, Dr. A.S. Baloda, Director, RARI-Durgapura, Jaipur, Dr. S.S. Yadav, Dean, COA, Lalsot and Dr. S. R. Dhaka, Dean, COA, Fatehpur participated in an online three-days training course on "Ethics in Governance" was organized by HCM-RIPA, Jaipur from 28-30 July, 2021.
- Mr. S.K. Aman, AAO-I, Comptroller office and Mr. B.S. Bunkar, ASO, Registrar office, SKNAU, Jobner participated in online three-days training course on "Pension & Retirement Rules" organized by HCM-RIPA, Jaipur from 02-04 August, 2021.
- Dr. Vikas Kumar Arya, SMS, KVK, Navgaon and Dr. A.P. Singh, KVK, Ajmer attended 4 days training on "Application of remote sensing & GIS in agriculture" organized by August 02-05, 2021 organized by EEI, Aanad, Gujrat.
- Dr. R. L. Meena, Asstt. Professor, KVK, Dausa attended 3 days training on "Training Method and training management skills" from August, 09-12, 2021 organized by EEI, Anand.
- Sh. S. K. Sharma, Asstt. Professor (Computer Science) attended 3 days online faculty development program on "Recent Developments in Mathematics and Their Applications" organized by Jaipur Engineering College, Jaipur during from 12-14 August, 2021.
- Sh. Sunil Kumar Aman, AAO-I, Comptroller Office and Sh. Vijay Singh, ASO, Comptroller Office, SKNAU, Jobner participated an Online three-days training course on "Rajasthan Transparency in Public Procurement Act" organized by HCM-RIPA, Jaipur from 16-18 August, 2021.
- Dr. S.K. Sharma, Prof. (Ento.), KVK, Tabiji-Ajmer and Dr. Ram Pratap, SMS (Agro.) KVK, Gonera-Kotputli attended an online two-days training programme on "Effective Communication and Leadership Skills" organized by HCM-RIPA, Jaipur from 17-18 August, 2021.
- Sh. S. K. Sharma, Assistant Professor attended one week National Level FDP on "Modern Methods of Effective Teaching & Learning" from 17-21 August, 2021.
- Dr. M. P. Yadav, Professor (Horti.), ARS, Navgaon attended five days training on "Farmers Producers Organization" organized by ICAR-NAARM, Hyderabad from 17-24 August, 2021.
- Dr. S. C. Yadav, Sr. Scientist & Head, KVK, Navgaon, Dr. R. K. Dular, KVK, Bharatpur and Dr. D. S. Bhati, KVK, Ajmer attended 8 days training on "Management development programme on formation of FPO/FPC and preparing its business plan" from August 17-24, 2021 organized by ICAR-NAARM, Hyderabad.
- Dr. A. K. Meena, Asstt. Prof. (Pl. Patho.) and Dr. Jitendra Singh, Asstt. Prof. (Pl. Patho.), SKNCOA, Jobner participated in five-days online training programme on "Pest Surveillance" organized by NIPHM, Hyderabad from 23-27 August, 2021.

- Dr. K.C. Sharma, Prof. & Head (Ag. Ext.), Dr. B.S. Badhala, Asstt. Prof. (Ag. Ext.) SKNCOA, Jobner and Dr. D.K. Meena, Asstt. Prof. (Ag. Ext.), COA, Bharatpur attended an online five-days training programme on "ICT for Agricultural Extension: New Concepts" organized by College of Agriculture, Bawal, CCS, Haryana Agricultural University in Collaboration with MANAGE, Hyderabad from 23-27August, 2021.
- Dr. S. K. Goyal, Assistant Professor (Pl. Patho.) attended three days training on "Basics of Remote Sensing and GIS for Management of Soil and Water Resources" organized by UA&T, Banda from 25-27 August, 2021.
- Dr. D.K. Bairwa, Asstt. Prof. (Ento) & Dr. Suman Choudhary, Asstt. Prof. (Ento.), SKNCOA, Jobner and Dr. B.N. Sharma, Asstt. Prof. (Ento.) & Dr. R.S. Bajiya, Asstt. Prof. (Ento.) RARI, Durgapura attended an online five-days training course on "Fruit Fly Surveillance and Management" organized by NIPHM, Hyderabad from 30 Aug. - 03 Sept., 2021.
- Dr. Birbal Bairwa, Asstt. Prof. (Ento), RARI, Durgapura, Dr. Anil Meena, Asstt. Prof. (Ento), ARS, Navgaon and Dr. Jhumar Lal, Asstt. Prof. (Ento), ARS, Fatehpur attended an online five-days training course on "Pesticide Application Techniques and Safety Measures" organized by NIPHM, Hyderabad from 13-17 September, 2021.
- Dr. Pratibha Manohar, Asstt. Prof. (Maths) and S. K. Sharma, Asstt. Prof. (Computer Science) attended one week training on STTP on "Mathematical Softwares" organized by SKIT, Jaipur from 13-17 September, 2021.
- Dr. Uadal Singh, Assoc. Prof. (Hort.) RARI, Durgapura, Dr. Upendra Singh, Asstt. Prof. (Ag. Engg), SKNCOA, Jobner and Dr. Sweta Singh, Asstt. Prof. (Ag. Engg), COA, Bharatpur attended an online five-days training course on "Post-Harvest Management and Storage Techniques" to be organized by NIPHM, Hyderabad from 20-24 September, 2021.
- Dr. S.K. Goyal, Asstt. Prof. (Pl. Patho.), Dr. Pinki Sharma, Asstt. Prof. (Pl. Patho.), SKNCOA, Jobner and Dr. R.L. Meena, Asstt. Prof. (Pl. Patho.), KVK, Dausa attended an online five-days training course on "Quarantine Pathogens: Seed Health Testing and Molecular Diagnostic Techniques" to be organized by NIPHM, Hyderabad from 20-24th September, 2021.
- Dr. Lala Ram, Asst. Professor, KVK, Fatehpur attended 2 days training on "Up-gradation of HRD Skills for Extension Personnel" from September, 21-22, 2021 organized by EEI, Aanad, Gujarat.
- Dr. Rajhans Verma, Asstt. Professor (Soil Science) and Dr. S. S. Sharma, Asstt. Professor (Soil Science) attended Online National Traning on "Soil survey & Land Use Planning using Remote Sensing and GIS" organized by ICAR-National Bureau of Soil Survey and Land Use Planning, Nagpur from 27 September - 1 October, 2021.
- Dr. I.M. Khan, Prof. (Ext.) & DSW, SKNAU, Jobner, Dr. D.S. Bhati, Sr. Sci. & Head, KVK, Tabiji (Ajmer) and Dr. S. S. Shekhawat, Sr. Scientist & Head, KVK, Kotputli attended a five days training programme on "National Facilitators Development Programs" (NFDP) organized by MANAGE, Hyderabad.
- R.K. Meena, Assoc. Prof. (Ento.), Dr. S.K. Khinchi, Asstt. Prof. (Ento.) and Dr. S. K. Bairwa, Asstt. Prof. (Horti.), SKNCOA, Jobner attended an online five days training programme on "Plant Health Management in Protected Cultivation" organized by NIPHM, Hyderabad from 04-08 October, 2021.

- Dr. Kiran Gaur, Assoc. Prof. & Head, Ag. Stat., SKNCOA, Jobner attended an online ten days training programme on "Statistical Technique for Data Analysis in Agriculture" organized by ICAR-IASRI, New Delhi from 4-13 October, 2021.
- Dr. I. M. Khan, Prof. (Extension) & DDO, SKNAU, Jobner, Dr. Akhter Hussain, Assoc. Prof. (Ento.) and Mr. Sunil Kumar Aman, AAO-I, SKNAU, Jobner attended three days online training on "Administrative and Financial Rules" organized by HCM Rajasthan State Institute of Public Administration, Jaipur held from 20.10.2021 to 22.10.2021.
- Dr. S. K. Goyal, Asstt. Professor attended five days training on "Agricultural Legislations for Agricultural Extension Professionals" organized by MANAGE Hyderabad & BHU, Varanasi from 20-24 October, 2021.
- Dr. Jitendra Kumar, SMS, KVK, Fatehpur attended 2 days training on "Writing Skills for Print & Electronic Media" from October 23-24, 2021 organized by EEI, Anand, Gujarat.
- Dr. Jitendra Singh, Asstt. Prof. (Pl. Pathology) and Ms. Pinki Sharma, Asstt. Prof. (Pl. Pathology), SKNCOA, Jobner attended an online five days training programme on "On-Farm Production of Biological Agents and Microbial Biopesticides" organized by NIPHM, Hyderabad from 08-12 November, 2021.
- Dr. A. K. Meena, Asstt. Prof. (Pl. Patho.), Dr. S. K. Goyal, Asstt. Prof. (Pl. Patho.), SKNCOA, Jobner, Dr. Vipin Kumar, Assoc. Prof. (Ento.) and Dr. M. R. Yadav, Asstt. Prof. (Agro.), RARI, Durgapura attended an online three days training programme on "Indiscriminate use of pesticides and fertilizers in Agriculture" organized by NIPHM, Hyderabad from 15-17 November, 2021.
- Mr. Sunil Kumar Aman, AAO-I and Mr. Fateh Singh Gaur, Clerk Gr-I, SKNAU, Jobner and Mr. G.P. Singh, ASO, SKNCOA, Jobner attended an online three days training programme on "Rajasthan Transparency in Public Procurement Act" organized by HCM-RIPA, Jaipur from 15-17 November, 2021.
- Dr. A.K. Meena, Asstt. Prof. (Pl. Patho.) and Dr. S.K. Goyal, Asstt. Prof. (Pl. Patho.), SKNCOA, Jobner attended an online five days training programme on "Advanced techniques for identification of Quarantine Pathogens" organized by NIPHM, Hyderabad from 29 November - 3 December, 2021.
- Dr. Varsha Kumari, Asstt. Prof. (PBG) and Dr. M. K. Meena, Asstt. Prof. (PBG) SKNCOA, Jobner attended an Online 14-days faculty training programme on "Molecular Biology Tools and its Application in Agriculture and Allied Sciences" organized by Centre of Excellence in Agri biotechnology, SVPUAT, Meerut (U.P.) from 1-14th December, 2021.
- Dr. A. K. Meena, Asstt. Professor (Pl. Pathology) attended Massive Open Online Course (MOOC) organized by ICAR-NAARM from 1-31 December, 2021.
- Dr. Pratibha Manohar, Asstt. Professor (Maths) attended one week training on FDP on Computing with "MATLAB and LATEX Software: Indispensable Tools for Researchers" organized by Baba Farid College, Bhatinda, Mizan-Tepi University, Ethopia and MathTech Thinking Foundation, India from 5-11 January, 2022.
- Dr. D.S. Bhati, Dr. S.K. Sharma, Dr. R.K. Sharma, Dr. R. Porwal and Dr. A.P. Singh, KVK, Ajmer attended 3 days training on presentation skills for professional excellence from January 05-07, 2022 organized by EEI, Anand.
- Dr. D.S. Bhati, Dr. S.K. Sharma, Dr. R. Porwal, Dr. A.P. Singh, KVK, Ajmer, Dr. R. L. Meena, Asst. Professor, KVK, Dausa, Dr. Poonam, SMS and Dr. H. R. Mali, SMS, KVK, Navgaon attended 3 days

training on "Leadership Development and Team Building Skills for Extension Functionaries" January 10-12, 2022 organized by EEI, Anand.

- Dr. D. S. Bhati, KVK, Ajmer, Dr. R. L. Meena, Asstt. Professor, KVK, Dausa, Dr. Jitendra Kumar, SMS, KVK, Fatehpur, Sh. Madho Singh, SMS, KVK, Dholpur, Dr. R. K. Dular and Sh. K.A Meena, KVK, Bharatpur attended 3 days training on "Furtherance in IPM approaches for important agricultural and horticultural crops" from January, 19-21, 2022 organized by NCIPM, Hyderabad.
- Dr. B.L. Jakhar, Assoc. Prof. (Ento.), RARI, Durgapura, Jaipur and Dr. S.K. Khinchi, Asstt. Prof. (Ento.), SKNCOA, Jobner attended ten days ICAR Sponsored short course on "Scientific Management of Apis mellifera Colonies for Nutritional and Economic Security" organized by CCSHAU., at Hisar from 25 January-3 February, 2022.
- Dr. D. S. Bhati, KVK, Ajmer and Dr. H. R. Mali, SMS, KVK, Navgaon attended 7 days training on "Seed quality parameters and production technology of pulse crops" from February 03-09, 2022 organized by ICAR-IIPR, Kanpur.
- Dr. I.M. Khan, Prof. (Ext. Edu.), & DSW, SKNAU, Jobner attended an online six days training on "National Facilitators Development Program (NFDP)" organized by NIAEM (MANAGE), Hyderabad from 07-12 February, 2022.
- Dr. A. K. Meena, Asstt. Prof. (Plant Patho.) and Mrs. Pinki Sharma, Asstt. Prof., (Plant Patho.), SKNCOA, Jobner at tended an online 12 days training programme on "Plant Biosecurity and Incursion Management" organized by NIPHM, Hyderabad from 7- 18 February, 2022.
- Mr. S. K. Aman, AAO-I, Mr. Harish Kumawat, Jr. Acctt. and Mr. Fateh Singh, Clerk Gr-I, Comptroller office, SKNAU, Jobner attended three days training program on "Rajasthan Transparency in Public Procurement Act" organized by HCM – RIPA, Jaipur from 21 – 23 February, 2022.
- Dr. S.S. Punia, Assoc. Prof. (PBG), Dr. A.C. Shivran, Prof. (Agron.), Dr. G. L. Kumawat, Asstt. Prof. (Pl. Patho) and Dr. G.K. Mittal attended three days training on "Data digitalization and visualization" organized by ICAR-IISR & ICAR-AICRP on Spices, Calicut, Kerala from 22-24 February, 2022.
- Dr. S.P. Bishnoi, Asstt. Prof. (Nematology) and Dr. Hemraj Gurjar, Asstt. Prof. (Nematology) RARI, Durgapura, Jaipur and Dr. B.S. Chandrawat, Asstt. Prof. (Nematology), SKNCOA, Jobner attended an online five days Training programme on "Field Diagnosis and Management of Plant Parasitic Nematodes" organized by NIPHM, Hyderabad from 14-18, March, 2022.
- Dr. Manoj Kumar Meena, Asstt. Professor (PBG) attended one week online faculty development programme on "Advanced Research Methodology" organized by AI Degree College & Science Tech. Institute, Lucknow from 21-27 March, 2022.
- Dr. D.K. Bairwa, Asstt. Prof. (Ento.) SKNCOA, Jobner and Dr. J.K. Bana, Asstt. Prof. (Ento.), COA, Lalsot (Dausa) attended an online five days training programme on "Fruit Fly: Surveillance and Management" organized by NIPHM, Hyderabad from 4-8 April, 2022.
- Dr. R.K. Meena, Assoc. Prof. (Ento.) and Dr. Suman Choudhary, Asstt. Prof. (Ento.), SKNCOA, Jobner attended three days training program on "Invasive Alien Species: Introduced and Emerging Pests" organized by NIPHM, Hyderabad from 11-13 April, 2022.

- Dr. K. C. Sharma, Professor (Ext. Edu.) and Dr. J. P. Yadav, Professor (Ext. Edu.) SKNCOA, Jobner attended three days training program on “Communication and Leadership Skills” organized by HCM-RIPA, Jaipur from 18-20 April, 2022.
- Dr. Manisha Sharma, Asstt. Prof. (Ento.) SKNCOA, Jobner and Dr. Birbal Bairwa, Asstt. Prof. (Ento.) RARI, Durgapura, Jaipur attended online five days training programme on “Production Protocol for Microbial Bio-pesticides” organized by NIPHM, Hyderabad from 18-22 April, 2022.
- Dr. Nitin Chawala, Asstt. Prof. (Pl. Patho.), RARI, Durgapura, Jaipur attended an online two-week refresher course on “Advanced Research Methodology” organized by Ramanujan College, University of Delhi, New-Delhi form 22 April to 06 May, 2022.
- Dr. R. L. Meena, Asstt. Professor, KVK, Dausa and Dr. H. R. Mali, SMS, KVK, Navgaon, Sh. K. A. Meena, KVK, Bharatpur attended 5 days training on “Stored grain pest: Detection identification and management” from May 09-13, 2022 organized by NIPHM, Hyderabad.
- Dr. P.S. Shekhawat, Asstt. Prof. (Ag. Eco.), SKNCOA, Jobner and Dr. Sheela Kharkwal, Asstt. Prof. (Ag. Eco.), SKNCOA, Jobner. attended an online 14-days Inter-disciplinary Refresher Course on “Research Methodology” organized by Pondicherry University, Pondicherry from 12-25 May, 2022.
- Dr. Mukesh Nitharwal, Asstt. Prof. (Ento.), COA, Fatehpur (Sikar) and Dr. Birbal Bairwa, Asstt. Prof. (Ento.), RARI, Durgapura, Jaipur attended an online five days training programme on “Pest Surveillance” organized by NIPHM, Hyderabad from 23-27 May, 2022.

8. PUBLICATION

During the period under report, the teaching, research and extension activities carried out by the faculties and students were published in national and international journals, accounting 358 research papers and authoring 18 books as well as 48 chapters in books. The faculties also published 07 technical bulletin/booklets, 17 folders, 06 manuals and 211 technical articles. The number of research papers during last three years is presented here under:

Table : NAAS publication during five years

Year	NAAS Rating				Total
	>6	5.1-6.0	4.1-5.0	0.0-4.0	
2018	29	26	16	10	81
2019	28	38	18	08	92
2020	39	86	31	04	160
2021	41	99	39	34	213
2022	87	163	65	43	358

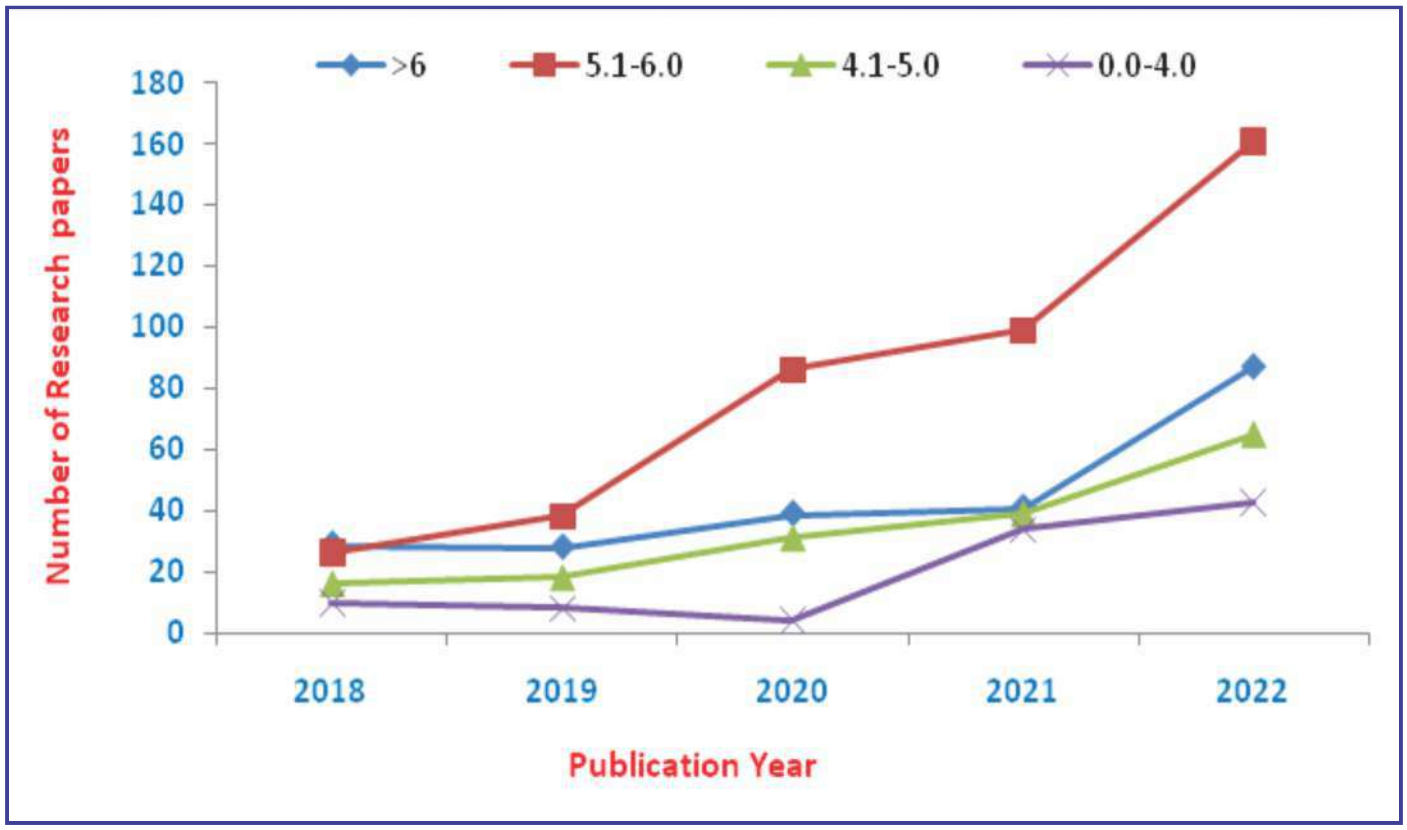


Fig. Comparative chart of NAAS publication during five years

1. Agarwal, V. P., Gupta, N. K., Gupta, S. and Singh, S. (2021). Screening of wheat germplasm for terminal heat tolerance under hyper arid conditions. *Cereal Research Communication*, **49**: 375-383. **(NAAS Rating: 6.85)**
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