Agriculture University, Jodhpur
A Decade Journey
(2013-14 to 2023-24)

Agriculture University, Jodhpur

Jodhpur 342 304, Rajasthan

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कलराज मिश्र
राज्यपाल, राजस्थान

सत्यमेव जयते

Kalraj Mishra
Governor, Rajasthan

संदेश

मुझे यह जानकर प्रसन्नता हुई है कि कृषि विश्वविद्यालय, जोधपुर का पांचवां दीक्षांत समारोह आगामी 8 जून को आयोजित किया जा रहा है तथा इस अवसर पर एक पुस्तिका का प्रकाशन भी किया जा रहा है।

दीक्षांत विद्यार्थी जीवन का नव आरंभ है। यह वह समय है जब विद्यार्थी अर्जित ज्ञान का राष्ट्र और समाज के उपयोगार्थ प्रयोग करने में सक्षम होता है। कृषि विश्वविद्यालय, जोधपुर ने स्थापना के बाद निरंतर कृषि क्षेत्र के विकास में अपना योगदान दिया है। इसी संदर्भ में विश्वविद्यालय की एक दशक की प्रगति तथा कृषि अनुसंधान, प्रसार, संस्थान एवं आधारभूत विकास सहित अन्य कार्यों के आलोक में पुस्तिका प्रकाशन का कार्य सुखद है।

चाहता हूं, इसमें प्रकाशित सामग्री इस रूप में संजोयी जाए कि उससे भविष्य की एक दृष्टि बने। प्रसार, शोध और शिक्षा के क्षेत्र में आपका विश्वविद्यालय निरंतर अग्रणी रहते कार्य करे, ऐसी कामना है।

मेरी दीक्षांत समारोह और प्रकाश्य पुस्तिका के लिए हार्दिक शुभकामनाएं हैं।

कलराज मिश्र
(कलराज मिश्र)

दिनांक: 5 जून, 2024

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कृषि विश्वविद्यालय, जोधपुर

जोधपुर 342 304, राजस्थान

Agriculture University, Jodhpur

Jodhpur 342 304, Rajasthan

Prof. B. R. Choudhary

Vice-chancellor

Foreword

It gives me immense pleasure to introduce the "Agriculture University, Jodhpur: A Decade Journey (2013-14 to 2023-24)" a comprehensive compilation of achievements, advancements and insights that highlight the remarkable journey of our agricultural endeavors over the past ten years. This report stands as a testament to the dedication, innovation, and hard work of the entire agriculture community in Western Rajasthan. Agriculture, as the backbone of our state's economy, has always been a priority for us. The Agriculture University, Jodhpur has played a pivotal role in shaping the future of farming practices, sustainable resource management and rural development. Through this report, we gain a deeper understanding of the transformative strides taken in research, education and outreach by the University.

The contributions made by the faculty, researchers, students and stakeholders are commendable. Their commitment to finding solutions that address the challenges of climate change, water scarcity and food security is truly inspiring. Their dedication has not only strengthened our agricultural landscape but has also empowered countless lives. The University's collaborations with government agencies, industries and farmers have fostered an environment of synergy, ensuring that knowledge translates into actionable outcomes at the grassroots level. Let us continue to work together, harnessing the power of knowledge and collaboration, to build a prosperous and resilient agricultural sector for our state.

As we look ahead, this report provides valuable insights to guide our future strategies in the realm of agriculture and allied sectors. The innovative practices, successful case studies, and lessons learned will undoubtedly guide us in achieving sustainable growth, enhancing rural livelihoods and ensuring food sovereignty.

I extend my heartfelt appreciation to everyone who has contributed to the "Agriculture University, Jodhpur: A Decade Journey (2013-14 to 2023-24)." I congratulate the entire faculty on this significant milestone and express my anticipation for the transformative journey that lies ahead.

Sincerely,

(B. R. Chaudhary)

Date : 5 June, 2024

Contents

1. Overview

The Agriculture University, Jodhpur was established on September 14th, 2013 vide Government of Rajasthan Act No. 21 of the year 2013 with the jurisdiction comprises of six districts *i.e.* Jodhpur, Barmer, Nagaur, Pali, Jalore and Sirohi.

1.1 Location

The headquarter of Agriculture University, Jodhpur is located at Jodhpur city. It is 10 km away from main railway station and 13 km. away from airport on National Highway 62 towards Nagaur.

1.2 Objectives of the University

The University has the following objectives, namely

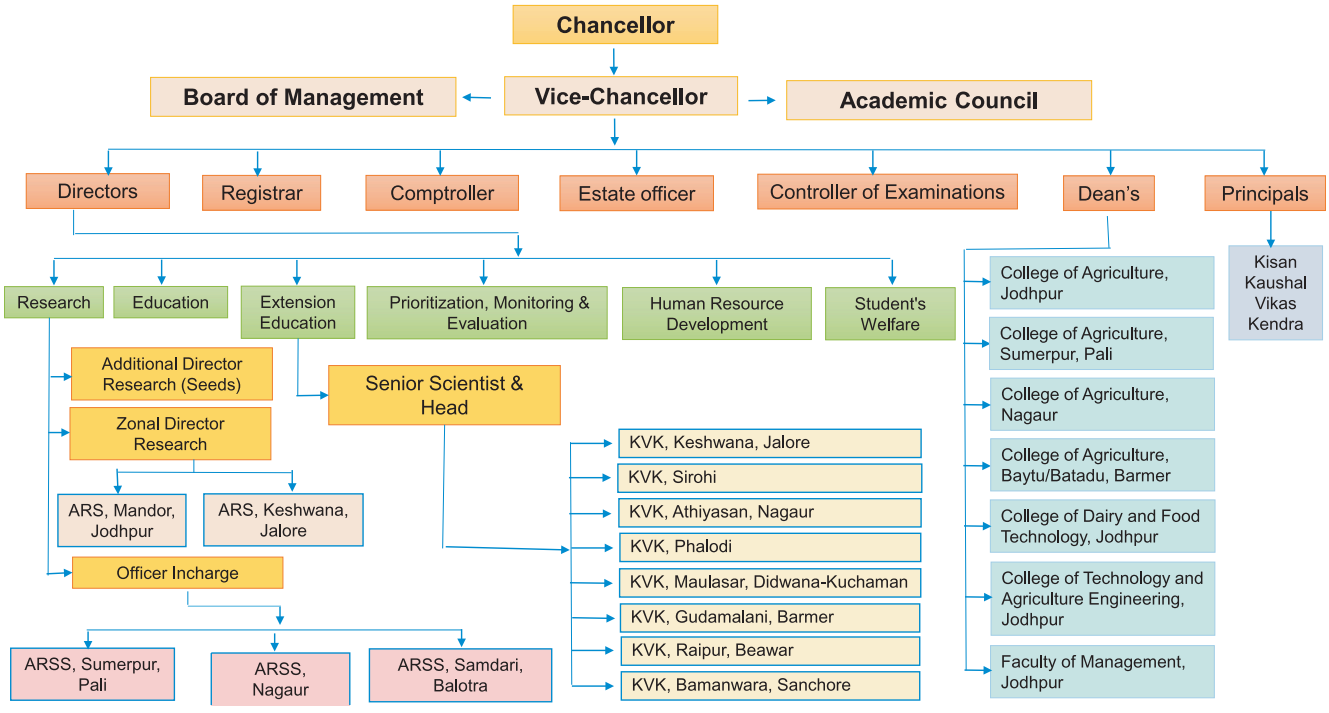
(a) Making provision for imparting education in different branches of study, particularly agriculture, horticulture, fisheries, forestry, agricultural engineering, home science, basic science and other allied branches of learning and scholarship;

(b) Furthering the advancement of learning and conducting of research, particularly in agriculture and other allied sciences;

(c) Undertaking the extension education of such sciences and technologies specially for the rural people of the State;

(d) Such other objectives as the University may determine from time to time.

1.3 Organizational Setup of the University



1.3.1 Board of Management

The Board of Management is a principle executive body of the University and it is administering the University in the best possible way since its establishment. The decisions most suitable for the growth and development of the University are being taken by the board and implemented. The board plays its role in uplifting the University from a single unit to a cluster of well established research, extension and academic excellence. A total of 23 meetings of Board of Management were held on different dates to discuss various matters.

1.3.2 Vice-Chancellor

The Vice-Chancellor is the highest-ranking administrative and academic officer in a university or educational institution. This role involves a combination of leadership, management, and academic responsibilities to ensure the effective functioning and growth of the institution. The Vice Chancellor reports to the Board of Trustee's or Governor and works closely with faculties, staff, students and external stakeholders. Dr. L.N. Harsh was appointed as the first Vice-Chancellor of the University (Table 1.1).

Table 1.1: List of Vice-Chancellors

S.No.	Name	Period
1.	Dr. L. N. Harsh	21.09.2013 to 20.09.2014
2.	Sh. H. K. Gera (IAS) (Div. Commissioner, Jodhpur), Additional charge	21.09.2014 to 06.02.2015
3.	Dr. B. R. Chhipa (VC, SKRAU, Bikaner), Additional charge	07.02.2015 to 25.03.2016
4.	Prof. (Dr.) Balraj Singh	26.03.2016 to 25.03.2019
5.	Prof. (Dr.) Bhagirath Singh (VC, MGSU, Bikaner), Additional charge	26.03.2019 to 21.08.2019
6.	Prof. (Dr.) B. R. Choudhary	22.08.2019 to 22.08.2022
7.	Prof. (Dr.) K. L. Shrivastava (VC, JNVU, Jodhpur), Additional charge	22.08.2022 to 30.09.2022
8.	Prof. (Dr.) B. R. Choudhary	30.09.2022 to Continue

1.3.3 Registrar

The Registrar is a senior administrative position of the University and is responsible for overseeing and managing various administrative and academic functions related to student records, academic services and University policies. The Registrar plays an important role in maintaining the integrity and accuracy of academic records and supporting the overall administrative mission of the University (Table 1.2).

Table 1.2: List of Registrars

S.No.	Name	Period
1.	Sh. S.L. Sharma (RAS)	26.09.2013 to 24.02.2014
2.	Dr. K. K. Bora	24.02.2014 to 21.03.2014
3.	Sh. Aslam Mehar (RAS)	21.03.2014 to 06.10.2016
4.	Dr. B. R. Choudhary, Additional charge	07.10.2016 to 24.11.2016
5.	Smt. Shelly Kishnani (IAS)	25.11.2016 to 05.08.2018

S.No.	Name	Period
6.	Sh. O. P. Bishnoi (RAS)	06.08.2018 to 05.10.2018
7.	Sh. C. L. Shrimali (IAS)	06.10.2018 to 30.09.2019
8.	Sh. M. R. Bishnoi, Comptroller, Link Officer	30.09.2019 to 26.10.2019
9.	Sh. V. P. Singh (RAS)	26.10.2019 to 29.04.2020
10.	Sh. Arun Kumar Purohit (RAS/IAS)	29.04.2020 to 12.06.2022
11.	Smt. Priyanka Bishnoi (RAS)	13.06.2022 to 07.11.2022
12.	Mrs. Anjali Yadav, Comptroller, Link Officer	07.11.2022 to 13.08.2023
13.	Mrs. Aditi Purohit (RAS)	14.08.2023 to Continue

1.3.4 Comptroller

The Comptroller is a head of the Finance department of Agriculture University, Jodhpur. He/She is responsible for overseeing and managing the financial operations, budgeting, accounting and reporting functions of the University and plays an important role in maintaining the financial health and stability of the institution. A list of Comptrollers served the University since establishment is given in the Table 1.3.

Table 1.3: List of Comptroller

S.No.	Name	Period
1.	Sh. S. L. Sharma (IAS), Additional Charge	26.09.2013 to 24.02.2014
2.	Dr. K. K. Bora, Additional Charge	25.02.2014 to 31.08.2014
3.	Dr. M. C. Bohra, Additional Charge	01.09.2014 to 10.11.2014
4.	Sh. G. L. Tiwari (RAcS)	11.11.2014 to 10.05.2015
5.	Sh. V. R. Choudhary (RAcS)	11.05.2015 to 21.12.2017
6.	Dr. G. R. Khairwa, Additional Charge	22.12.2017 to 31.12.2017
7.	Dr. S. R. Kuhmar, Additional Charge	01.01.2018 to 19.03.2018
8.	Sh. M. R. Bishnoi (RAcS)	20.03.2018 to 18.04.2021
9.	Sh. Jasraj Chouhan (RAcS)	19.04.2021 to 16.10.2021
10.	Mrs. Anjali Yadav (RAcS)	16.10.2021 to Continue

1.4 Brief Progress of University

The University is esteemed to have a strong teaching, research and extension setup to envisage agricultural development in the western parts of Rajasthan. For education, there are four Agriculture Colleges at Jodhpur, Sumerpur (Pali), Nagaur and Baytu/Batadu (Barmer); one College of Dairy and Food Technology at Jodhpur; one College of Technology and Agriculture Engineering at Jodhpur while for research there are two Agricultural Research Stations (Mandor, Jodhpur and Keshwana, Jalore) and three Agricultural Research Sub-Stations (Sumerpur, Samdari and Nagaur), and for out reach programme and transfer of technology, the University has eight Krishi Vigyan Kendras (KVKs) working at Jalore, Sirohi, Athiyasan (Nagaur), Phalodi, Maulasar (Nagaur),

Gudamalani (Barmer), Raipur (Beawar), Bamanwara (Sanchore). There is one exclusive training centre: Kisan Kaushal Vikas Kendra (KKVK) at University head quarter which was established by support of RKVY and State Govt. to provide training to farmers, rural youths, and industrial persons as per need.

Major milestone / Establishment of Units

- 2013 - Establishment of Agricultural University, Jodhpur by State Government through bifurcation of SKRAU, Bikaner & MPUAT, Udaipur and transferred service area along with respective units in the Districts of Jodhpur, Nagaur, Barmer, Pali, Jalore (from SKRAU, Bikaner) and Sirohi (from MPUAT, Udaipur).
- 2015 - Establishment of College of Agriculture, Nagaur
- 2019 - Accreditation of University and its constituent colleges by ICAR
- 2020 - Establishment of Kisan Kaushal Vikas Kendra, Jodhpur
- 2020 - Establishment of Faculty of Dairy Technology, Jodhpur
- 2020 - Establishment of Faculty of Agriculture Engineering, Jodhpur
- 2021 - Establishment of College of Agriculture, Baytu/Batadu, Barmer
- 2021 - Approval of Faculties of Dairy Technology (B. Tech. Dairy Technology) and Agriculture Engineering (B. Tech. Agriculture Engineering) by AICTE
- 2022 - Allotment of 108 ha land by Govt. of Rajasthan at NH 62 on Jodhpur-Nagaur Road for the University
- 2022 - Land allotment for KVK, Raipur and KVK, Bamanwara
- 2022 Establishment of KVK, Raipur (Beawar)
- 2022 - Establishment of KVK, Bamanwara (Sanchore)
- 2022 - Provisional approval of section 80G of Income Tax Act (25.05.2022 to AY 2025-26)
- 2023 - Started new programme of B.Tech. (Dairy Technology) and MBA (Agri-Business Management)
- 2023 - Approval of B. Tech. (Food Technology) and MBA (Agri-Business Management) programmes by AICTE
- 2023 - Establishment of Faculty of Management, Jodhpur

The University is offering various degree progarmmes *i.e* Undergraduate, Post-graduate and Ph.D. as details mentioned in Table 1.4.

Table 1.4: Details of unitwise degree programme and their year of initiation in different colleges

S.No.	Name of the Programme	Year of start	Student intake	College
1.	B.Sc. (Hons.) Agriculture	2012	120	College of Agriculture, Jodhpur (2012)
	M.Sc. (Ag.) Genetics and Plant Breeding	2016	8	
	M.Sc. (Ag.) Agronomy	2016	8	
	M.Sc. (Ag) Hort./M.Sc. (Hort.) Vegetable Science	2016/ 2022	8	
	M.Sc. (Ag.) Plant Pathology	2018	8	
	M.Sc. (Ag.) Entomology	2019	8	
	M.Sc. (Ag.) Extension Education	2019	6	
	M.Sc. (Ag.) Soil Science	2023	6	
	M.Sc. (Ag.) Organic Farming	2023	4	

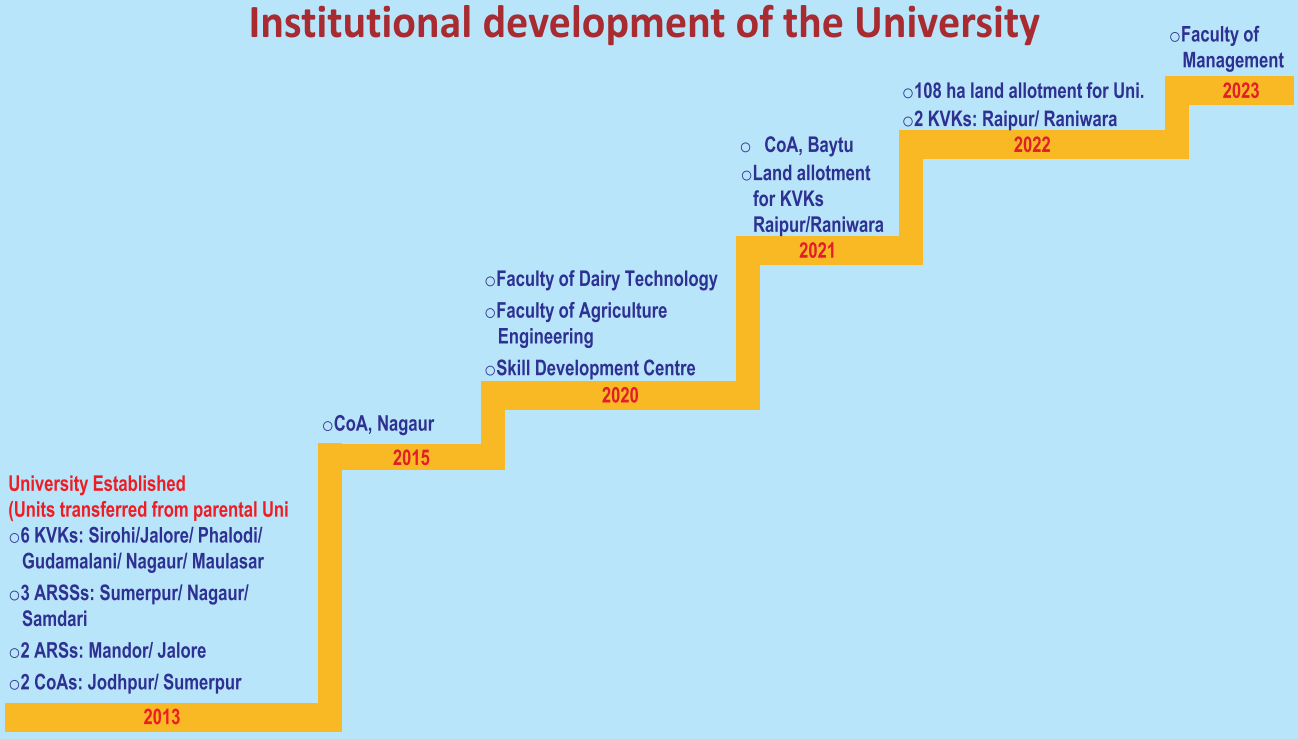
S.No.	Name of the Programme	Year of start	Student intake	College
	Ph.D. Genetics and Plant Breeding	2018	4	College of Agriculture, Jodhpur (2012)
	Ph.D. Agronomy	2018	4	
	Ph.D. Hort./Vegetable Science	2018/ 2022	4	
	Ph.D. Plant Pathology	2022	4	
	Ph.D. Entomology	2022	4	
2.	B.Sc. (Hons.) Agriculture	2012	120	College of Agriculture, Sumerpur (Pali) (2012)
3.	B.Sc. (Hons.) Agriculture	2015	120	College of Agriculture, Nagaur (2015)
4.	B.Sc. (Hons.) Agriculture	2021	60	College of Agriculture, Baytu (2021)
5.	B.Tech. (Dairy Technology)	2020	40	College of Dairy and Food Technology, Jodhpur (2020)
	B.Tech. (Food Technology)	2023	40	
6.	B.Tech. (Agriculture Engineering)	2021	40	College of Technology and Agriculture Engineering, Jodhpur (2020)
7.	MBA (Agri-Business Management	2023	40	College of Dairy and Food Technology, Jodhpur / Faculty of Management, Jodhpur (2023)

Considering National Education Policy 2020, the University is continuously increasing the student intake from 120 students during 2013-14 to 656 students in 2023-24 (Table 1.5 and Fig. 1.1 & 1.2). Efforts are being made towards making the University as multi-faculty beside Agriculture, new faculties such as Dairy and Food Technology, Technology & Agriculture Engineering and Management Studies are started.

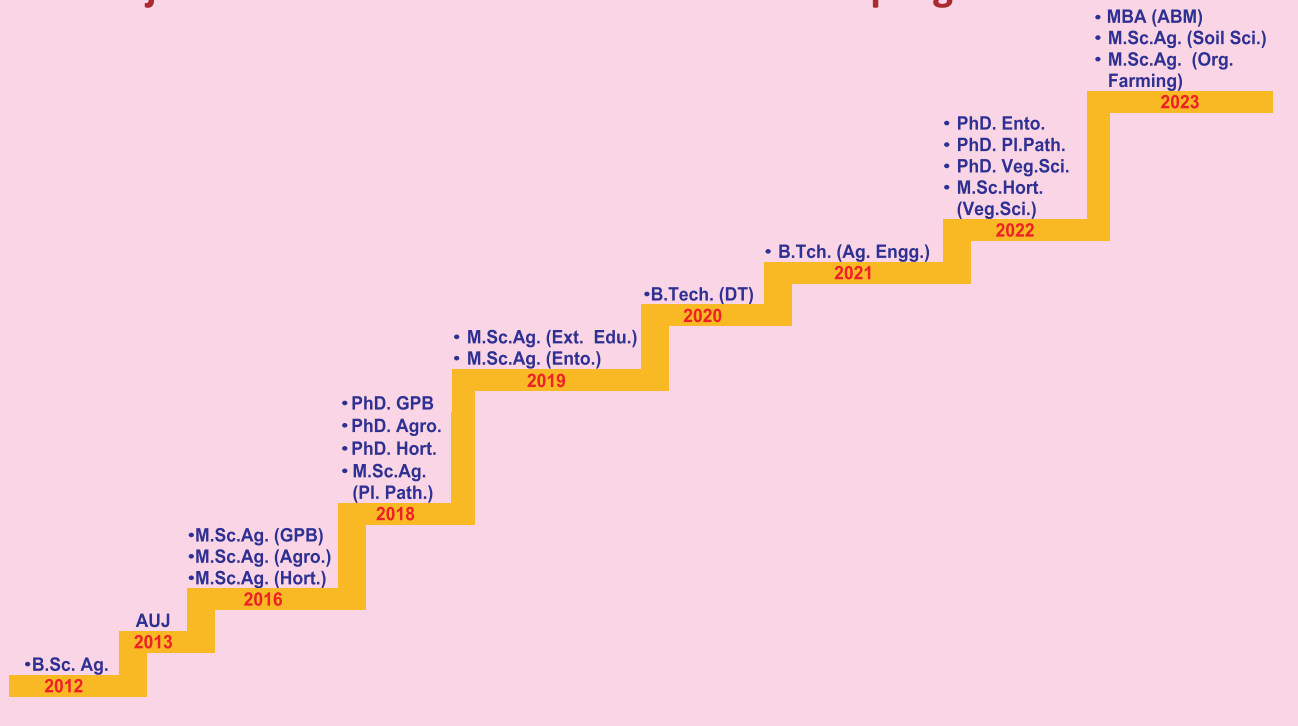
Table 1.5: Student intake capacities in the University

Year	Number of students			Total
	UG	PG	Ph.D.	120
2013-14	120	-	-	120
2014-15	120	-	-	120
2015-16	180	-	-	180
2016-17	180	12	-	192
2017-18	180	12	-	192
2018-19	180	18	6	204
2019-20	180	26	6	212
2020-21	220	24	6	250
2021-22	380	24	6	410
2022-23	440	36	10	486
2023-24	540	96	20	656

Institutional development of the University



Major milestones for initiation of different programmes



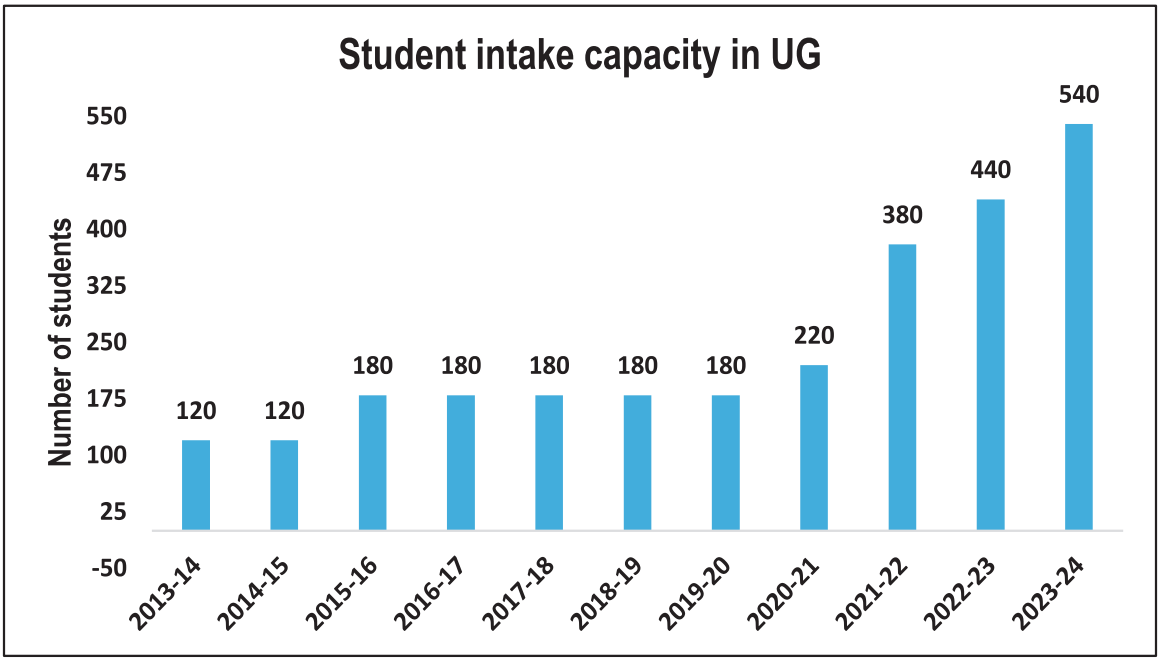


Fig. 1.1: Students intake capacity in UG programme

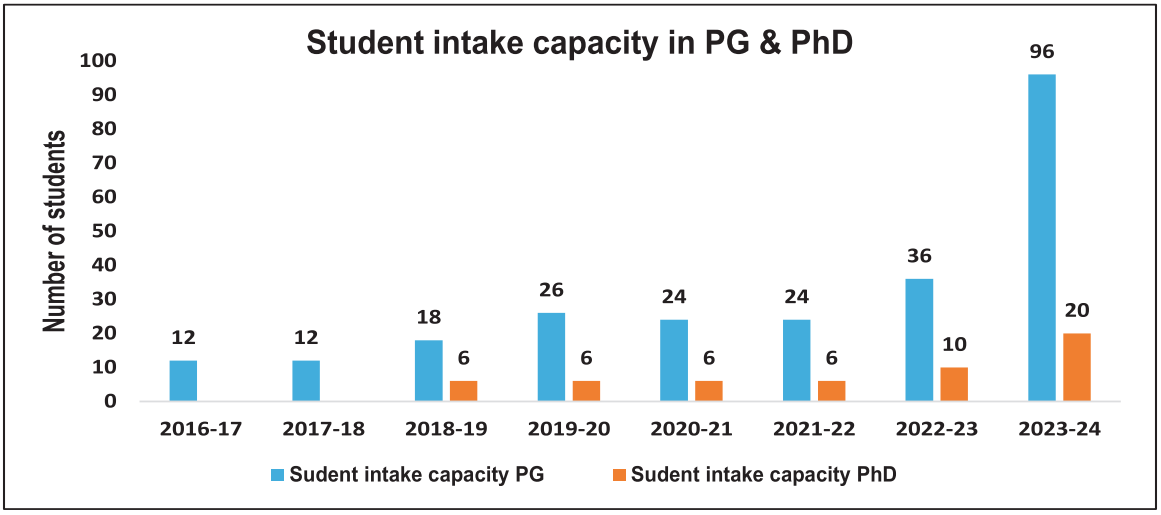


Fig. 1.2: Students intake capacity in PG & Ph.D. programme

1.4.1 Infrastructure Development

1.4.1.1 University Administrative Building

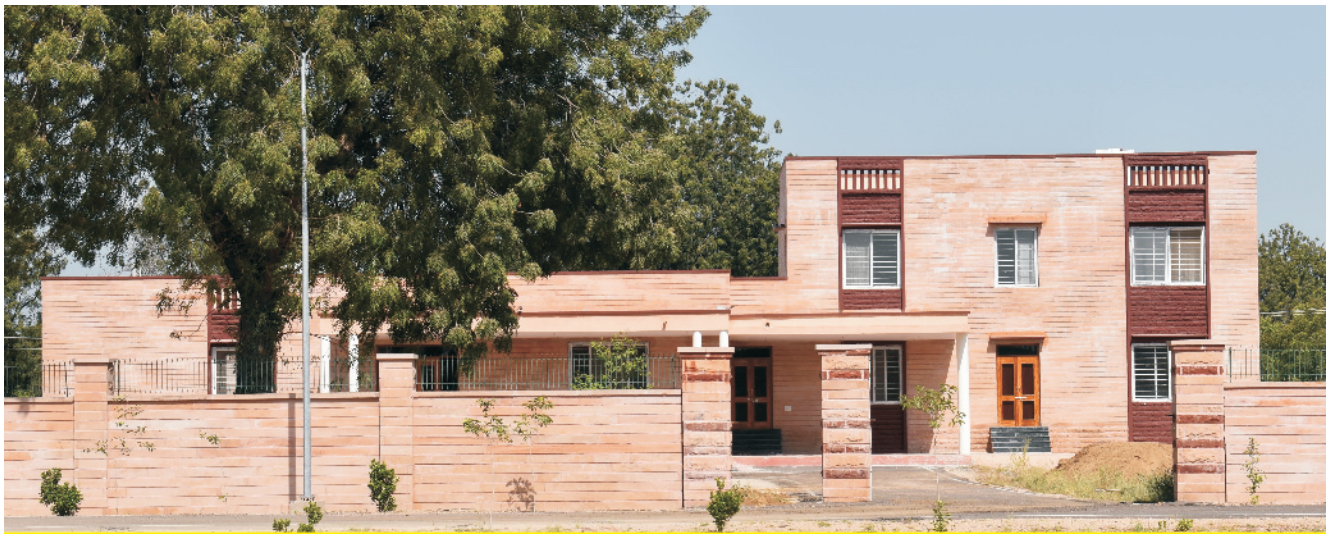
The foundation stone of the University administrative building was laid down in virtual mode on 10th June, 2021 by Hon'ble Governor Shri Kalraj Mishra as Chief Guest, Hon'ble Chief Minister Shri Ashok Gehalot as President, Shri Lal Chand Kataria, Agriculture Minister and Bhajan Lal Jatav, State Agriculture Minister both as Guest of Honour. Its civil work is completed with having facilities of Vice-Chancellor's secretariat along with offices of all the Directorates, Registrar, Comptroller, Controller of Examinations, Estate Officer etc. Besides, it has facilities of two meeting halls, one conference hall etc.

1.4.1.2 Entrance Gate & Outlet Facilities

To connect to main highway road, a new entrance gate for University has been constructed which opens towards the NH-65 on Jodhpur-Nagaur-Bikaner in-front of railway station, Mandor. Two outlet facilities for seeds and University products, ATM, security office and information center were also created.

1.4.1.3 Vice-Chancellor's Residence

Vice-Chancellor's residence along with residential office was constructed in the University Campus.



1.4.1.4 Land Allotment by State Government

State Government has allotted total land of 144 ha in the year 2022 *i.e* 108 ha. land for the University on NH-65 on Jodhpur-Nagaur-Bikaner, 20 ha land for the KVK, Raipur on NH 162, Pali-Bar-Beawar and 16 ha land for KVK, Bamanwara at SH Mandar-Raniwara, Sanchore.

1.4.1.5 Farmer's Training Institute

The Kisan Kaushal Vikas Kendra (KKVK), Jodhpur has been established with the financial support from RKVY and State Government through a project in the year 2020. The KKVK is functioning for skill training in agriculture and allied sciences to make them employable and earn their livelihood.

1.4.1.6 Farmer's Hostel

The construction of a new farmer's hostel has been completed which is having facilities of accommodation of 60 persons.

1.4.1.7 Samvidhan Park

Samvidhan Park including Samvidhan Stambha is being constructed as per directives of Hon'ble Governor Sir in the main campus of the University. The main motto of this establishment is to get acquaint of duties and rights among students, faculties and even visitors. The construction work is almost completed.

1.4.1.8 Establishment of Colleges

College of Agriculture, Jodhpur: The College of Agriculture, Jodhpur has shifted to a new campus at GTC Farm having facilities of Administrative Block, Academic Block UG and PG, Examination Hall, Library, two hostels, different experiential learning units *i.e.* poultry, animal husbandry, mushroom unit, farm office, threshing floor etc.

College of Agriculture, Sumerpur: Second phase work at College of Agriculture, Sumerpur worth Rs. 3.0 crores and Girls Hostel of Rs. 2.5 crores has been completed. In the year 2023-24, work of Rs. 2.5 crores have been sanctioned for Boy's Hostel, 50 lakhs for construction of boundaries & roads of Girls Hostel and 35 lakhs for establishment of dairy unit and work is under progress. Poultry and Goatry ELP unit has been constructed.

College of Agriculture, Nagaur: The Rajasthan Government has sanctioned College of Agriculture at Nagaur in the academic year 2015-16 with Rs. 23 crores for civil work. The first phase of civil work has completed while second phase of work including construction of hostels and staff quarters has also almost completed.

CDFT and CTAE, Jodhpur: Simlarly, the State Government has announced establishment of Dairy and Agricultural Engineering faculties in Agriculture University, Jodhpur during the budget session, 2020-21 and sanctioned Rs. 33 crores for civil work of both faculties. The foundation stone has been laid by Sh. Ashok Gehlot, Hon'ble Chief Minister Govt. of Rajasthan on 11.11.2022. The works of both the campuses are in progress at newly allotted land, Sawant Kuan, Nagaur Road, Jodhpur.

College of Dairy and Food Technology

College of Technology and Agriculture

College of Agriculture, Baytu/Batadu, Barmer: The State government has announced College of Agriculture at Baytu/Batadu, Barmer in the budget session 2021-22 and sanctioned an amount of Rs. 14.2 crores for civil work. For establishment of the college, 30 ha lands has been allotted at Batadu, Barmer by the State Government. The work has been started by the Rajasthan State Agricultural Marketing Board Agency. The foundation stone has been laid by Sh. Harish Choudhary, Hon'ble MLA of Baytu and Former Minister, GoR on 06.08.2023.

1.4.1.8 Medium Term Storage Facility (Germplasm)

Medium term storage facility for conservation of plant genetic materials has been developed by using RKVY grants. It has two cold storage rooms with the capacity of storage 5000 germplasm and other important breeding materials.

1.4.1.9 Soil & Water Testing Laboratory

Thirteen Soil, Water and Plant Analysis Laboratories are functional at different units of the University for field experiments and farmers field samples.

1.4.1.10 Soil Testing Mobile Van

Mobile Van Facilities for on spot analysis of Soil and water samples of farmers at village level is available (Sanctioned under RKVY in 2021) under Directorate of Extension Education.

1.4.1.11 Agro-Meteorological Unit

University has well established agro-meteorological unit at Jodhpur. The unit is established with the technical support of Indian Meteorological Department, Pune.

1.4.1.12 Renovation of Conference Hall

The Auditorium has been completely renovated with central AC system, Audio Visual system, panel and dressing facility under RKVY project worth 31.0 lakhs.

1.5 Budget

The total budget received by the University in various projects from State, ICAR and other organization was Rs. 2379.97 lakhs in the year 2014-15 which was increased by 4.7 times (Rs. 11233.20 lakhs) in the year 2023-24. The year wise details are presented in the Table 1.6 & Fig 1.3.

Table: 1.6: Details of total budget* (Rs. in Lakhs) received during last decade

S. No.	Financial years	State Govt.				RKVY	ICAR			Other Adhoc Projects	Grand Total
		Non Plan	Plan	AICRP 25% share	Total		KVKs (100%)	AICRP (75% share)	PC Unit Project (100%)		
1	2014-15	300.00	1042.87	62.92	1105.79	100.00	193.26	222.96	348.19	109.77	2379.97
2	2015-16	334.00	1103.51	48.35	1151.86	199.97	282.65	174.70	232.90	1165.16	3541.24
3	2016-17	259.09	1619.38	36.88	1656.26	544.00	392.82	70.18	204.72	2276.49	5403.56
4	2017-18	480.00	1844.88	55.78	1900.66	646.68	444.81	166.17	289.63	1354.79	5282.74
5	2018-19	511.62	2253.60	50.93	2304.53	550.00	523.21	171.17	409.16	2183.00	6652.69
6	2019-20	605.00	2197.10	52.90	2250.00	856.00	526.69	77.64	116.34	1780.64	6212.31
7	2020-21	565.00	2348.08	51.92	2400.00	267.00	459.13	140.05	244.33	2294.42	6369.93
8	2021-22	-	3750.00	59.40	3809.40	105.00	718.96	161.02	261.42	2416.39	7472.19
9	2022-23	-	5740.00	71.50	5811.50	65.00	976.61	91.97	320.68	2518.41	9784.17
10	2023-24	-	6730.00	80.50	6810.50	290.00	1010.50	122.20	350.00	2650.00	11233.20*

*Tentative

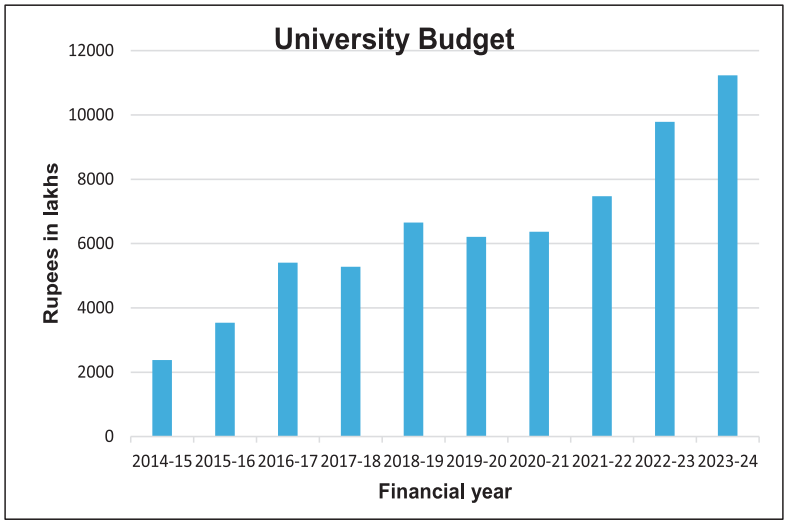


Fig 1.3: Details of year wise University Budget

1.6 Projects

1.6.1 Long Term and Ad-hoc Projects

1.6.1.1 MIDH Project

A Centrally Sponsored Scheme, Mission for Integrated Development of Horticulture (MIDH), DASD, Calicut, GOI is working since 2004-05 as long term Ad-hoc project. The project aims to promote the overall growth and development of the horticulture sector. The scheme encompasses various aspects of horticulture including fruits, vegetables, root and tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa, and bamboo. Under the MIDH, the Government of India (GOI) contributes 85% of the total outlay for developmental programs in all states (except for the states in North East and the Himalayas regions where the GOI's contribution is 100%). The remaining 15% share is contributed by the respective State Governments.

Agriculture University, Jodhpur has actively participated in this scheme and has made significant contributions for the development of spice crops (particularly seed spices) from 2013-14 to 2023-24. Over the past ten years the CSS-MIDH Project at Agriculture University, Jodhpur has made significant strides in the production of various spice crops such as cumin, fenugreek, coriander, fennel, nigella, dill and chilli at different centers within the University. During the period, an impressive total of 13 tonnes of seeds of various spices have been produced. This substantial production has not only contributed to the availability of high-quality spice seeds but has also provided valuable resources for further cultivation. To support the production activities, the project allocated a production cost of Rs. 63.75 lakhs to various centers of the University which facilitated the efficient management of the crops, ensuring optimal yields and in maintaining quality standards.

Out of a total amount of Rs. 110.95 lakhs allocated, Rs. 99.89 lakhs has been utilized for the construction of various facilities at different units.

During 2023-24 103.90 lakhs has been sanctioned including establishment of Bio-Control Lab costing amount 90 lakhs.

1.6.1.2 Adhoc Projects

The University has received several Adhoc projects under RKVY, DST, BARC and other national and international organizations (Table 1.7 and Fig. 1.4). A total grants of Rs. 6058.48 lakhs received including Rs. 3623.65 lakhs from RKVY, Rs. 2166.24 lakhs from other national agencies and 247.59 lakhs from international organization in different projects.

1.6.1.2.1 Rasthriya Krishi Vikas Yojana

A total of Rs. 3623.65 lakhs were received under RKVY in different projects for enhancing production of quality seed, agro-biodiversity conservation, genetic improvement and development of production technology of future crops, scaling up water potential on computer and sensor based, establishment of model nursery, establishment of Kisan Kaushal Vikas Kendra, establishment of ATIC, development of digital library cum information technology, strengthening of seed processing and grading facility, processing and value addition in chia and quinoa, establishment of center of excellence on millets etc.

1.6.1.2.2 Externally funded ad-hoc research projects from other National Agencies

A total of Rs. 2166.24 lakhs were funded by ICAR, DBT, BARC, DST, IFFCO and National Organigation/Agencies in different projects and work was conducted/being conducted for various objectives like innovation grant under NAHEP for Strengthening of Agriculture University, field evaluation of trombay crop genotypes, technology integration for doubling farm income through participatory research and extension approaches, mainstreaming sesame germplasm, enhancing farmers' livelihood security in arid Rajasthan, establishment of tissue culture lab., development of processing line for 'Sangri' establishment of solar tree, development and popularization of arid horticulture based integrated farming system, models fostering sustainable seed production in grasses and trees etc. Eight new projects were received by different National agencies and total budget of 802.1 lakhs is sanctioned.

1.6.1.2.3 Externally funded ad-hoc research projects by International Agencies

A total of Rs. 247.59 lakhs were received from International Organization such as Bioversity International, Kirkhouse Trust and APN in different projects for various objectives like mainstreaming agricultural biodiversity conservation, evaluation of stress tolerant orphans legumes for use in dryland farming systems, consumption of resilient orphan products for healthier diets and impact of agroforestry system (AFS) on soil fertility parameters.

Table 1.7: List of ad-hoc projects

S.No.	Title of Projects	Year	Location	Fund Received (Rs. in Lakhs)
A.	**RKVY**			
1.	Enhancing production of quality seed through development of University farms	2014-15	AU, Jodhpur	501.00
2.	Agro-biodiversity conservation and management centre	2014-15	ARS, Mandor, Jodhpur	252.40
3.	Genetic improvement and development of production technology of future crops like Chia, Quinoa and Dragon fruit	2016-17	ARS, Mandor, Jodhpur	18.20
4.	Varietal development of Isabgol (*Plantago ovata* Forsk.) for high yield and quality	2016-17	ARS, Mandor, Jodhpur	21.21
5.	Genetic improvement and developing production technology of *Henna*	2016-17	ARS, Mandor, Jodhpur	43.13
6.	Scaling up water potential on computer and sensor based for precise use of irrigation water in different vegetable crops in light textured sandy soils of Western Rajasthan	2016-17	ARS, Mandor, Jodhpur	122.72
7.	Establishment of model nursery for multiplication of promising cultivars of arid fruits	2016-17	ARS, Mandor, Jodhpur	34.72
8.	Multi-location evaluation of nationwide released varieties of field and annual horticultural crops under arid and semi-arid climate and its promotion for enhancing productivity for famers benefit	2016-17	All Units of AU, Jodhpur	31.31
9.	Establishment of *Kisan Kaushal Vikas Kendra* : A model for Agricultural University	2016-17	AU, Jodhpur	896.82
10.	Establishment of ATIC and development of digital library cum Information Technology (IT) tool based interactive system for farmers training and benefit at Agriculture University, Jodhpur	2016-17	AU, Jodhpur	455.26
11.	Strengthening of seed processing and grading facility for quality seed production to enhance agricultural productivity of arid and semi-arid regions of Rajasthan	2016-17	ARS, Mandor, Jodhpur	423.36
12.	Studies on cropping sequence and intercropping models to minimize the risk incurred in cumin cultivation for the benefit of growers	2017-18	ARS, Mandor, Jodhpur	71.64
13.	Development of integrated farming system models for small farm holders and tribal farmers of district Sirohi	2018-19	CoA, Sumerpur/KVK, Sirohi	103.97
14.	An Approach Towards to Farmers Income Enhancement in Barmer District of Rajasthan	2018-19	ARSS, Samdari	192.91
15.	Center of excellence on Post Harvest Management	2021-22	CoA, Jodhpur	10.00
16.	Processing and Value addition of superfood chia and quinoa	2021-22	CoA, Nagaur	95.00
17.	Center of Excellence on Millets	2022-23	ARS, Mandor	500.00
	Total			**3623.65**

S.No.	Title of Projects	Year	Location	Fund Received (Rs. in Lakhs)
B.	**Externally funded ad-hoc research projects received from National Agencies**			
1.	Field Evaluation of Trombay Crop Genotypes and Research Activities in Agriculture, BARC, Mumbai (2017-18 to 2021-22)	2017-18	ARS, Mandor, Jodhpur	50.00
2.	Innovation grant under NAHEP for Strengthening of Agriculture University, Jodhpur for Accreditation, ICAR	2018-19	AU, Jodhpur	418.00
3.	Technology Integration for Doubling Farm Income through Participatory Research and Extension Approaches in Jodhpur District, ICAR	2018-19	DEE, Jodhpur	172.69
4.	Mainstreaming sesame germplasm for productivity enhancement and sustainability through genomics assisted core development and trait discovery (DBT Project)	2020-21	ARS, Mandor	60.69
5.	Development and dissemination of technology to strengthen production of cumin and pearl millet sponsored by Department of science and technology, DST, New Delhi	2021-22	ARSS, Nagaur	107.00
6.	Enhancing Farmers' Livelihood Security in Arid Rajasthan through Value addition, Design and Development of Harvester for Kair, Moringa and Nagauri Methi, DST, New Delhi	2021-22	ARS, Jalore	235.00
7.	Effects of IFFCO's Nano fertilizers on Growth and yield of important Kharif and Rabi crops of Zone Ia of Rajasthan	2022-23	ARS, Mandor	13.73
8.	Production of Biochar from different agricultural waste, its evaluation, technology dissemination and their impact on crop species and soil health enhancement, Science and Engineering Research Board (SERB), New Delhi	2022-23	CoA, Sumerpur	32.13
9.	Integrated rural livelihood programme for improving income of rural households under CER initiative of BLMCL	2022-23	AU, Jodhpur	880.00
10.	NCAP-Design and Development of Pedestrian Urban Park along the boundary wall of JNVU (New Campus) (2022-23)	2022-23	AU, Jodhpur	197.00
	Total			**2166.24**

S.No.	Title of Projects	Year	Location	Fund Received (Rs. in Lakhs)
C.	**Externally funded ad-hoc research projects received from International Organization**			
1.	Mainstreaming Agricultural Biodiversity Conservation and Utilization in Agricultural Sectors to Ensure ecosystem Services and Reduce Vulnerability, Bioversity International (2018 to 2020), USD 32,400	2018-19	CoA, Mandor, Jodhpur	38.27
2.	Evaluation of Stress Tolerant Orphans Legumes for use in dryland farming systems across sub-Saharan Africa and Kirkhouse Trust, India – Promoting India-Africa Framework for Strategic Cooperation, Kirkhouse Trust, 2018-19	2018-19	ARS, Mandor, Jodhpur	48.62
3.	Consumption of resilient orphan products for healthier diets from Bioversity International (2022 to 2025),	2022-23	ARS, Mandor	21.00
4.	Impact of Agroforestry System (AFS) on soil fertility parameters including soil microbial biodiversity and organic carbon in western Rajasthan, funded by Agroforestry Promotion Network (APN), Lobsigen, Switzerland	2023-24	ARS, Mandor	139.70
	Total			**247.59**
	Grand Total (A+B+C)			**6058.48**
New projects sanctioned (2023-24)				
A.	**Externally funded ad-hoc research projects received from National Agencies**			
1.	Establishment of tissue culture lab.	2023-24	AU, Jodhpur	159.50
2.	Development of processing line for '*Sangri*' by Advance Drying Technique for retaining the nutritious values of '*Sangri*' by improving the livelihood status of marginal farmers through local entrepreneurship	2023-24	AU, Jodhpur/ Watershed Area, Jodhpur	45.98
3.	Spineless cactus: New feed for Thar animals	2023-24	Jodhpur, Pali, Jalore, Sirohi and Nagaur	135.00
4.	Establishment of Solar Tree	2023-24	Jodhpur	15.12
5.	Fostering sustainable seed production in grasses and trees: Farmer led Participatory Approach for Community Empowerment and Bio diversity Conservation	2023-24	Jalore, Barmer, Nagaur, Jodhpur	129.05
6.	Conserve & Develop Common Property Land at Village Level in Western Rajasthan Through Community	2023-24	Pali, Barmer	127.90
7.	Development and popularization of arid horticulture based integrated farming system models for socio-economic and nutritional security of farmers	2023-24	Jodhpur, Sirohi, Pali, Jalore, Nagaur and Barmer	156.55
8.	Understanding agronomic physio-biochemical and molecular response to drought stress in cumin, Science and Engineering Board, DST, New Delhi	2023-24	AU, Jodhpur	33.00
	Total (New Projects)			**802.10**

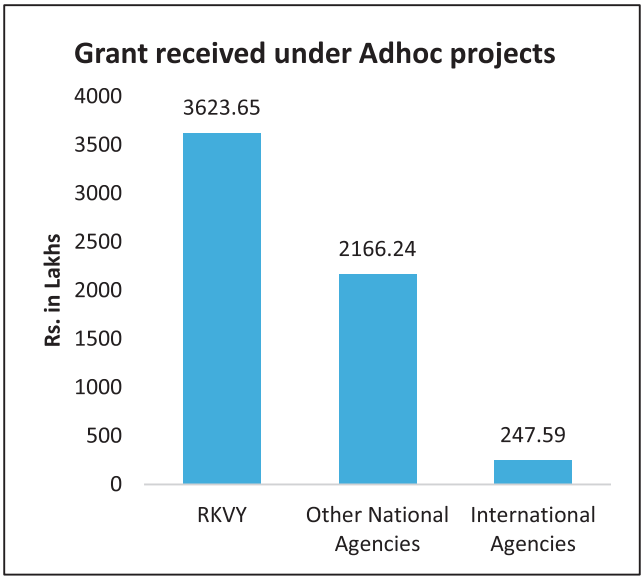


Fig. 1.4 Grants received in Adhoc projects

1.6.2 Seed Hub Project (ICAR & DAC)

To strengthen seed production programme in pulses, pearl millet (hybrid & parental lines) and sesame at different units of the University, a total of Rs. 720 lakhs were allotted under Seed Hub Project (Table 1.8).

Table 1.8: Seed hub projects budget sanctioned to AU, Jodhpur

S.No.	Unit	Crop(s)	Project cost (Rs. in Lakhs)
1.	ARS, Keshwana, Jalore	Pulses	150.00
2.	KVK, Nagaur	Pulses	150.00
3.	ARSS, Sumerpur	Pulses	150.00
4.	ARS, Mandor, Jodhpur	Pearl millet (A,B, R lines)	70.00
5.	ARSS, Sumerpur	Sesame	150.00
7.	ARS, Mandor, Jodhpur	Pearl millet (hybrid Seed)	50.00
		Total	**720.00**

1.6.3 Fund received by the University as testing fees

University has received a sum of Rs. 474.25 lakhs as a testing fees from different companies/institution for testing of their products (Table 1.9 and Fig. 1.5).

Table 1.9 Year-wise details of testing fees received by the University

S.No.	Financial Year	Testing fees received (Rs. in Lakhs)
1.	2014-15	3.00
2.	2015-16	4.50
3.	2016-17	25.50
4.	2017-18	27.00
5.	2018-19	33.00
6.	2019-20	47.50
7.	2020-21	36.50
8.	2021-22	47.50
9.	2022-23	143.50
10.	2023-24	106.25
	Total	**474.25**

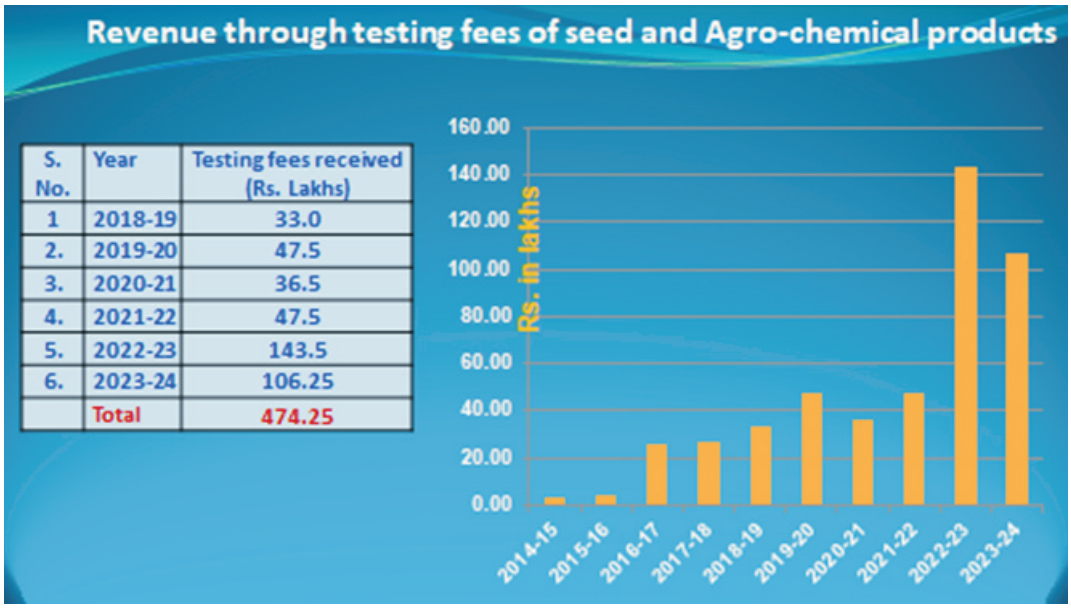


Fig. 1.5 Testing fee received by the University

1.7 Details of teaching and non-teaching post sanctioned

A total of 677 posts of admintrative (20), teaching (259) and Non-teaching staff (398) were sanctioned by the State and ICAR in different projects. The details are given in the Table 1.10.

Table 1.10: Details of total sanctioned post including Deputation in the University

S No.	Name of Post	State plan	Non-plan	ICAR-AICRPs, PC Unit & KVK	Total
A. Administrative Post					
1.	Administration	20	-	-	20
B. Teaching Posts					
1	Professor	19	3	-	22
2	Associate Professor	37	17	15	69
3	Assistant Professor	142	31	12	185
4	Lecturer	5	-	-	5
5	Assistant librarian	5	-	-	5
	Total	**228**	**51**	**27**	**306**
C. Non Teaching Posts		222	47	147	416
Grand Total		**450**	**98**	**174**	**722**

1.8 MoU's Executed by Agriculture University, Jodhpur

To strengthen research, education and extension activities of the University, a total of 53 Memorandum of Understandings have been signed with various National/International Institutions and Organizations including private companies. International organizations/institutions like Bioversity International (Global Environmental

Facility); the Agroforestry Promotion Network (APN), Switzerland; Kirkhouse Trust, UK; International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and National originations/institutes like Indian Council of Agricultural Research, New Delhi; Bhabha Atomic Research Centre, Mumbai; Central Institute of Post-Harvest Engineering and Technology (ICAR-CIPHET), Ludhiana; Central Institute of Agricultural Engineering, Bhopal; Warehousing Development and Regulatory Authority, New Delhi; Agricultural and Processed Food Products Export Development Authority (APEDA) etc. (Table 1.11).

Table 1.11: List of MoUs signed by the University with other organizations

S.No.	MoUs executed between Agriculture University, Jodhpur and the parties	Date/Duration	MoU Particulars
1.	Indian Council of Agricultural Research	20.03.2014	In respect of an establishment of PC Unit of AICRP on Pearl Millet at AU, Jodhpur by the Council
2.	M/s Wellnext Seeds (India) Pvt. Ltd.	15.07.2017 4 years	For the production and marketing of Bajra Hybrid MPMH 17
3.	M/s. Sai Sadguru Seeds, Himayatnagar, Hyderabad	11.01.2018 4 years	For the production and marketing of Bajra Hybrid MPMH 17
4.	The Kirkhouse Trust, Unit 6 Fenlock Court Blenheim office Park, Long Hanborough, Oxforeshire (UK)	May 2018 1 Year	Evaluation of Stress Tolerant Orphan Legumes for Dryland Farming Systems across Sub-Saharan Africa and India Promoting India-Africa Framework for strategic Cooperation.
5.	Maharana Pratap University of Agriculture & Technology, Udaipur	9.07.2018 3 years	For facilitating students training and postgraduate research in the field of agriculture and allied sectors.
6.	Bhabha Atomic Research Centre (BARC), Dept. of Atomic Energy (DAE), Mumbai	26.07.2018 5 Years	For Collaborative Research & Development Programme on "Field Evaluation of Trombay crop genotypes and Research activities in Agriculture
7.	M/s Sri Laxmi Venkateswara Seeds, Peddapadu, Kurnool	09.08.2018 4 years	For the production and marketing of Bajra Hybrid MPMH 17
8.	Bioversity International project funded by UN Environment–Global Environmental Facility	01.09. 2018 2 years	Mainstreaming agricultural biodiversity conservation and utilization in agricultural sectors to ensure ecosystem services and reduce vulnerability with basic objectives to conserve local land races and popularize these among farmers.
9.	M/s Sampoorna Seeds, ADONI, A.P.	22.10.2018 4 years	For the production and marketing of Bajra Hybrid MPMH 17
10.	ICAR-Directorate of Rapeseed and Mustard, Bharatpur	Jan. 2019 3 years	For facilitating Students' Training/ Postgraduate Research
11.	ICAR-Central Institute for Arid-Horticulture, Bikaner	29.01.2019/28.12.2022 5 years	For facilitating Students' Training/ Postgraduate Research
12.	ICAR-National Bureau of Plant Genetics Resources, New Delhi	01.02. 2019	For Facilitating students training and Postgraduate research in the field of agriculture and allied sectors

S.No.	MoUs executed between Agriculture University, Jodhpur and the parties	Date/Duration	MoU Particulars
13.	M/s Dharti Putra Beej Company, Jodhpur	06.02.2019 4 years	For the production and marketing of Bajra Hybrid MPMH 17
14.	M/s Manak Hybrid Seeds Co., F 213, RIICO Industrial Area, Mandor, Jodhpur	07.02.2019 4 years	For the production and marketing of Bajra Hybrid MPMH 17
15.	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, Telangana State, India	14.02.2020 5 years	To develop human resources and to generate appropriate, efficient and effective transferable technology for sustainable growth in agriculture and allied fields.
16.	Dr. Sarvepalli Radhakrishan Rajasthan Ayurved University, Jodhpur	08.06.2020 3 years	Interaction of agriculture that meets the need of quality food and Ayurveda, the holistic medical system both of which are vital for wellbeing of society.
17.	Rajasthan ILD Skills University, Jaipur	19.06.2020 5 years	The parties intend to focus their efforts on cooperation within area of skill based training, education, research & development and employment.
18.	ICAR-Indian Institute of Soybean Research, Indore (M.P.)	09.11.2020 3 years	For facilitating Student's Training/ Postgraduate Research
19.	ICAR-Indian Institute of Wheat and Barley Research, Karnal, Haryana	22.12.2020 5 years	For Postgraduate Research Collaboration
20.	ICAR-Central Soil Salinity Research Institute, Zarifa Farm (Karnal)	28.12.2020 3 years	For facilitating Students' Training/ Postgraduate Research
21.	M/s Classic Hybrids Seeds Pvt. Ltd., Sola, Ahmedabad	26.02.2021 3 years	For the production and marketing of Sesame/Til variety RT-351
22.	M/s Classic Hybrids Seeds Pvt. Ltd., Sola, Ahmedabad	26.02.2021 4 years	For the production and marketing of Bajra Hybrid MPMH 17
23.	Indian Council of Agricultural Research, New Delhi	09.03.2021	In respect of All India Coordinated Research Project/Revolving Fund/ Any other such schemes sanctioned by ICAR.
24.	ICAR-National Research Centre on Seed Spices, Tabiji, Ajmer, Rajasthan	24.07.2021 3 years	For cooperation in seed spices Education, Research and extension
25.	M/s Sri Laxmi Venkateswara Seeds, Kurnool	05.08.2021 4 years	For the Production and Marketing of Bajra Hybrid MPMH-17
26.	ICICI-Satat Aajeevika Society, Udaipur	30.09.2021 3 years	Cooperation for dissemination of know-how in identified fields of Agriculture & Dairy Technology
27.	Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce and Industry, New Delhi	15.11.2021 5 years	To work in collaboration for agri-exporters, key stakeholders & farmers for sustainability and quality production, GAP certification, traceability and providing support for expanding the Agri-trade and exports and establishing Indian Agriculture products globally.

S.No.	MoUs executed between Agriculture University, Jodhpur and the parties	Date/Duration	MoU Particulars
28.	ICAR, New Delhi	16.11.2021	For scientific and Technical Cooperation in the implementation of the project of KVK at Bamanwara, Raniwara, District Jalore (Raj.)
29.	ICAR, New Delhi	16.11.2021	For scientific and Technical Cooperation in the implementation of the project of KVK at Raipur, District Pali (Raj.)
30.	Indian Institute of Technology, Jodhpur	06.12.2021 5 years	For Academic Collaboration
31.	Indian Red-Cross Society, New Delhi	20.04.2022 3 years	Both parties will work within the mandates of each organization and adhere to the broad principles of humanitarian action as followed by the Red Cross Movement worldwide namely Humanity, Impartiality, Neutrality, Independence, Voluntary Service, Unity and Universality.
32.	MSME-Technology Development Centre (PPDC), EC, Nagaur	24.05.2022	Intent to cooperate and focus their efforts on cooperation within area of Skill Based Training, Education and Research.
33.	Jodhpur Municipal Corporation – South, Jodhpur	01.08.2022 3 years	For designing and development of Pedestrian Urban Park
34.	M/s Sampoorna Seeds, ADONI, A.P.	18.11.2022 4 years	For the production and marketing of Bajra Hybrid MPMH 35
35.	Barmer Lignite Mining Company Ltd., Barmer	09.12.2022 5 years	• Improve income of rural household and create sustainable employment/ self-employment for villagers. • Standardize various farming techniques for optimum utilization of available resources to achieve optimum production and Integrated Farming System (IFS) Models for small and marginal farmers for nutrition and income security. • Integration of Non-farm income generating activities. • Extension of technologies among farmers to achieve soil and water conservation for ecological sustainability.
36.	The Warehousing Development and Regulatory Authority, New Delhi	19.12.2022 3 years	Creating awareness through programmes for farmers, traders, millers, warehousemen/ warehouse managers, assayers/ graders and imparting knowledge to depositors/ farmers in respect of provisions of W(D&R) Act, e-NWR, Scientific storage practices, preservation practices, assaying procedures, stacking practices etc.

S.No.	MoUs executed between Agriculture University, Jodhpur and the parties	Date/Duration	MoU Particulars
37.	ICAR-Central Institute of Agricultural Engineering, Bhopal	06.04.2023 5 years	For providing a framework for long-term collaboration and advancement of knowledge sharing based on reciprocity and mutual interest/benefit in the broad domains of agriculture engineering, rural development and other allied fields/areas through joint/collaborative academic programmes, research etc.
38.	Hitachi Payment Services Private Limited	25.4.2023 9 years	For installation of ATM Machine and furnishing services in premises of the University in lieu of rent payment.
39.	The Agroforestry Promotion Network (APN), Switzerland through Dr. Roland Frutig,	01.05.2023	To promote Agroforestry for resilient agriculture under climate stress
40.	Information and Library Network (INFLIBNET) Centre, Gandhinagar	24.5.2023	For Shodhganga/ Shodhgangotri facilities
41.	ICAR-Indian Institute of Oilseeds Research, Hyderabad	03.06.2023 5 years	Research & education collaboration between both parties
42.	Acharya N.G. Ranga Agricultural University, Guntur, Andhra Pradesh	03.06.2023 5 years	Research & education collaboration between the parties
43.	ICAR- National Bureau of Plant Genetic Resources, New Delhi	5.6.2023	To work jointly for facilitating Student's Trainings/ Postgraduate Research etc.
44.	Watershed Development & Soil Conservation Department, GoR, Jaipur	6.6.2023	To establish a cooperative relationship with the aim of developing and fostering, primarily but limited to research, consultancy, capacity building; and work jointly in different projects
45.	BAIF Institute	19.6.2023	To produce quality seed of cumin and moth and to make available to the farmers
46.	ICAR-Central Institute of Post-Harvest Engineering and Technology (ICAR-CIPHET), Ludhiana	11.07.2023 10 years	Promote and accelerate the programmes of academic cooperation, students training, exposure visits, post-graduate and doctoral research
47.	National Horticultural Research and Development Foundation (NHRDF), New Delhi	1.9.2023 for 3 years	To strengthen research and development particularly on onion and garlic
48.	Cairn Foundation, Gurugram, Haryana	14.09.2023 3 years	Project intends to train youths at Cairn Centre of Excellence in Agriculture Sector by Agriculture University, Jodhpur across both vocational and degree courses.
49.	Heartfulness Education Trust, Vijaywada, Andhra Pradesh	14.09.2023 5 years	To collaborate with each other to conduct (i) Educational, (ii) Heartfulness relaxation, meditation and (iii) other connected wellness workshops to help students, teachers and staff to regulate their minds, moderate their tendencies, increase concentration and sharpen the use of their will.
50.	ICAR-ATARI, Jodhpur-II	14.09.2023	Strengthening education, research and extension activities.

S.No.	MoUs executed between Agriculture University, Jodhpur and the parties	Date/Duration	MoU Particulars
51.	VISRON Pvt. Ltd. & REDBIRD	3.10.2023	To develop the skill development/awareness to cater the drone industry in the country especially in the agricultural sector and also collaborate for DGCA approved Remote Pilot Certification training.
52.	Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu	21.11.2023	To strengthen education and research between the universities
53.	International Institute of Water, Jodhpur	14.3.2024	Research, trainings and awareness for conservation, saving and management of water particularly in Agriculture

1.9 Delegates of National and International repute visited to the University

- Hon'ble Governor of Rajasthan Smt. Margaret Alva, visited Agriculture University, Jodhpur on 23rd February, 2014.
- Dr. Stephenia Grando, Director, Research Programme, ICRISAT, Hyderabad visited University and the AICRP- Pearl millet programme of PC Unit on dated 28th October, 2015.
- Dr. J. S. Sandhu, Deputy Director General, Crop Science, ICAR, New Delhi has visited University on 15th October, 2015 and 14th September, 2016.
- On the eve of foundation day 14th September, 2016 and also 13th August, 2017 Dr. Trilochan Mohapatra, Director General, ICAR & Secretary, DARE, Government of India has visited the University.
- Shri C. R. Chaudhary, Ministry of State for Consumer Affairs, Food and Public Distribution visited on 28th January, 2018.
- Dr. S. R. Chintala, Chairman, NABARD visited University, on 30th September 2021.
- Hon'ble Governor of Rajasthan, Shri Kalaraj Mishra visited University on 10th February, 2023.
- Hon'ble Governor of Rajasthan, Shri Kalaraj Mishra visited University on 11th March, 2023.
- Dr. T. R Sharma, DDG-CS, ICAR and Dr. Sanjeev Gupta, ADG (Oilseed and Pulses) visited on 1st June, 2023.
- Dr. Homey Cheriyan, Director, DASD, Calicut visited the University on 8th June, 2023.


Visit of Hon'ble Governor Shri Kalraj Mishra

- Dr. Udham Singh Gautam, DDG (Agricultural Extension) visited the University on 19th June, 2023.
- Shri Lalchand Kataria, Honorable Agriculture Minister, Rajasthan and Shri Murari Lal Meena, Honorable State Minister, Agriculture Marketing, Rajasthan have visited University on 30th June, 2023.
- Dr. Prithviraj, Secretary to Government of Rajasthan, Agriculture and Horticulture Department and Shri Gaurav Agrawal, Commissioner Agriculture, Govt. of Rajasthan have visited the University on 30th June, 2023.

1.10 National and International Seminar/Symposium/Workshop

The University has organized many seminars/symposiums/meetings of national and international levels as details given in the Table 1.12.

1.12: National and International seminar/symposium/workshop organized in the University

S.No.	Title	Organizers	Date
1.	ICAR-All India Annual Workshop on Sesame and Niger	AU, Jodhpur and AICRP on Sesame and Niger	May 20-21, 2014
2.	National Seminar on Research and Developemnt Advances in Spises, Medicinal and Aromatic Crops Cultivation, Processing and Trade for Prosperity of Indian Farmers	AU, Jodhpur	Februrary 1-2, 2017
3.	53rd Annual Group Meeting of ICAR-AICRP on Pearl Millet	Agriculture University, Jodhpur & ICAR-AICRP on Pearl Millet, Jodhpur	March 22-24, 2018
4.	1st Vegetable Science Congress Emerging Challenges in Vegetable Research and Education	Agriculture University, Jodhpur and ICAR-Indian Vegetable Research Institute, Varanasi	February 1-3, 2019
5.	QRT meeting on Oilseeds	AU, Jodhpur and IIOR-ICAR, Hyderabad	October 10-12, 2022
6.	International Conference on Development and Promotion of Millets and Seeds for Livelihood Security	AU, Jodhpur and ICAR-AICRP on Pearl Millet, Jodhpur	February 24-26, 2023
7.	Annual Group meeting of AICRP on Oilseeds (Castor, Sunflower) and AICRP on Sesame & Niger-2023	AU, Jodhpur and IIOR-ICAR, Hyderabad	May 31-June 3, 2023
8.	Building partnership from Agreement to Action	Agriculture University, Jodhpur and Watershed Development and Soil Conservation, Govt. of Rajasthan	June 5-6, 2023
9.	17th Annual Review Meeting of MIDH programme of DASD	Agriculture University, Jodhpur & MIDH, Calicut	June 8-9, 2023
10.	Zonal Review Meeting of KVKs	AU, Jodhpur and ICAR-ATARI, Jodhpur	June 19-21, 2023
11.	National Symposium on Enhancing Agricultural Sectors Income through Integration, Diversification and Commercialization of Technologies	Agriculture University, Jodhpur, ICAR-ATARI Zone II, Jodhpur and Indian Arid Legumes Society, Jodhpur	September 1-2, 2023

1.11 Other Milestones Achieved

1.11.1 Getting ISO Certificate

Agriculture University, Jodhpur is proud to announce that it has got three prestigious ISO certificate during 2023 i.e. ISO 9001:2015 Quality Management System ISO 21001:2018 Educational Organizations, ISO 22000:2018 Food Safety Management Systems during January, 2024. It will recognize our commitment to excellence in teaching, research, extension and overall institutional activities. This certification is a testament to our dedication to maintaining the highest standards of quality and continuous improvement in all facets of our work.

The ISO certification is a globally recognized standard that validates an organization's adherence to quality management principles. Achieving ISO certification signifies that Agriculture University, Jodhpur, has implemented robust quality management systems across its core functions ensuring consistent quality, efficiency and effectiveness. This certification is particularly significant for Enhancing Credibility, Continuous Improvement, Global Recognition & Stakeholder Confidence.

ISO Certificate 9001:2015: Quality Management System (Services of education, research and extension education).

ISO Certificate 22000:2018: Food Safety Management Systems (for the activities such as Fruit Beverage, Jam, Jelly, Marmalade, Candy, Dehydrated Fruits, Pickles, Confectionery Items, Bakery Items, Different Oils, Dairy Products, Food Grains, Pulses, Value Added Products, Cosmetic Herbs etc.)

ISO Certificate 21001:2018: Educational Organizations (For the activities such as Undergraduate, Postgraduate & Doctoral Degree Programme & Short Term Diploma Courses in the Disciplines of Agriculture including Basic & Applied Sciences, Technology & Agriculture Engineering, Dairy & Food Sciences, Management, Allied Sciences etc.)

1.11.2 Registration with FSSAI

Agriculture University, Jodhpur, has been registered with the Food Safety and Standards Authority of India (FSSAI) bearing Registration no. 22224074000350 dated 29.02.2024 for the sale of agro products. This registration is a significant milestone in our on-going commitment to ensuring the highest standards of food safety and quality in our agricultural produce. The FSSAI serves as the apex regulatory body for food safety in India to ensure that food products are safe, hygienic and comply with set standards.

Products registered with FSSAI: Refined Groundnut oil, Refined Mustard/Rapeseed Oil, Sesame Oil, Pulses (Lentil (Masur), Black Gram (Urd), Green gram (Moong), Bengal gram (Chana or Chick pea) or Kabuli Chana or Chhole or (green chick pea), hara channa, Red gram (Arhar), Horse gram (Kulthi), Field bean (Black, Brown, White), Sem, Peas dry (Matra), Soybean, Rajmah or Double beans or Broad beans or Black beans, Lobia or black eyed beans or black eyed white lobia, Moth bean (matki), Chia Seeds, Millets, Biscuits, Groundnut oil, Rapeseed or Mustard oil, Carbonated Fruit Beverages or Fruit Drinks, Fruit Juice, Vegetable Juice, Squash, Crush, Fruit Syru/Fruit Sharbats, Cordial, Chicory, Coriander (Dhania), Cumin (Zeera, Kalonji), Fennek (Sunf), Fenugreek (Methi), Tomato Ketchup and Tomato Sauce etc.

1.11.3 Becoming Training Partner with FSSAI

Agriculture University, Jodhpur Joins hands with FSSAI and empaneled as a Training Partner under Food Safety Training & Certification (FoSTaC) Programme of FSSAI with Training ID No. TP23000043 dated 08.11.2023. This Certification authorizes the AU, Jodhpur to conduct trainings under FoSTaC programme for PAN India in all the available FoSTaC Courses. In its new role as a training partner with the Food Safety and Standards Authority of India (FSSAI) marks a significant milestone in our on-going efforts to enhance food safety, quality and standards across the agricultural and food sectors. This will help to train the needed youth & other stakeholders as per FSSAI norms for conducting training programme.

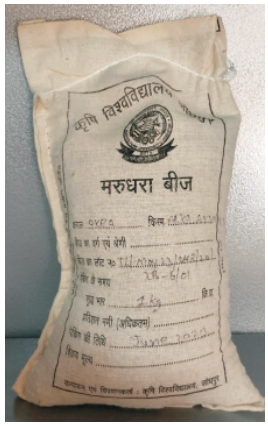
1.11.4. Starting of AU, Jodhpur selling out let

Agriculture University, Jodhpur is thrilled to announce the launch of our new selling outlet dedicated to offering high-quality agro products directly to consumers. This initiative is a significant step in our mission to bridge the gap between agricultural innovation and the market, providing fresh, safe, and sustainably produced food products.

Objective of the Selling Outlet: The primary objective of the selling outlet is to provide a direct platform for the sale of agro products cultivated and processed by Agriculture

University, Jodhpur. This outlet will showcase our commitment to sustainable farming practices and organic production. ensure Food Safety and Quality, offer products that meet stringent quality and safety standards, ensuring consumer health and satisfaction. support local farmers to provide an avenue for local farmers associated with the university to sell their produce, fostering community growth and development, enhance learning and research, serve as a practical learning and research platform for our students, enabling them to gain real-world experience in agricultural marketing and retail operations.

Products Available: Our selling outlet will offer a diverse range of agro products such as pickle, kachi gani sesame and mustard oil, pulses, bajra cake & snakes, kachri powder, dairy products like curd, lassi, paneer, flavoured milk, mehdi powder, feenel soft drink, methi leaves, Seeds of kitchen garden & etc. Beside this, a unit of Kachi Gani Oil & Dairy has been installed at the selling outlet.



1.12 Appreciation/Award given to University

Agriculture University, Jodhpur, is honored that we have been acclaimed by giving award/appreciation certificate by the Indian Council of Agricultural Research (ICAR) in recognition of our outstanding contributions as the best research center. This accolade is a testament to our unwavering commitment to excellence in agricultural

research, innovation, and development. The Indian Council of Agricultural Research, New Delhi has awarded prestigious awards such as

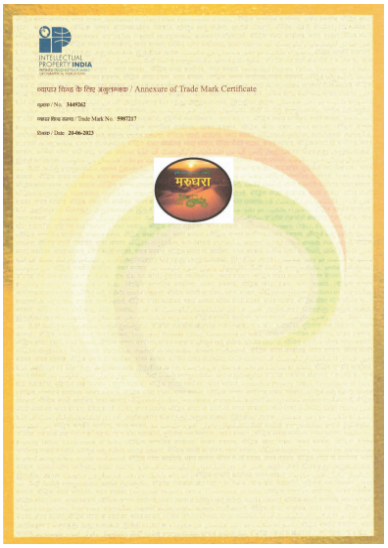
- Performance Excellence Award 2022-23 Farmer First Programme during 2023 for ATARI, Jodhpur Zone,
- Centre of Excellence, AICRP (Sesame) during 2023
- Award to Krishi Vigyan Kendra, Gudamalani during 2024
- During 2013 the Best KVK Award 2013 for Krishi Vigyan Kendra Sirohi for their outstanding contribution in extension education.

1.13 Securing Benefits with Form No. 10AC under Income Tax

Agriculture University, Jodhpur, has successfully obtained Form No. 10AC on dated 25.05.2022 under the Income Tax Act. This achievement grants us several fiscal benefits that will support our mission of advancing agricultural education, research, and extension services. By securing this registration, the university's income including donations and grants will be exempted from income tax, allowing us to allocate more resources towards educational and research activities. The tax-exempt status enhances the university's credibility, making it more attractive to potential donors and grant-making bodies.

1.14 Marudhara Trade Mark

Agriculture University, Jodhpur has obtained Trade Mark No. 5987217 Dated 20.06.2023 "Marudhara" from Trade Marks Registry, Government of India for various products/brands for marketing.



2. Research

2.1 Directorate of Research

The Directorate of Research of the University is headed by the Director Research and he/she is the monitoring authority for research activities. The Director also works as a member secretary of the Research Council and responsible for coordination among the different research units of the Directorate.

2.1.1 Organizational Setup

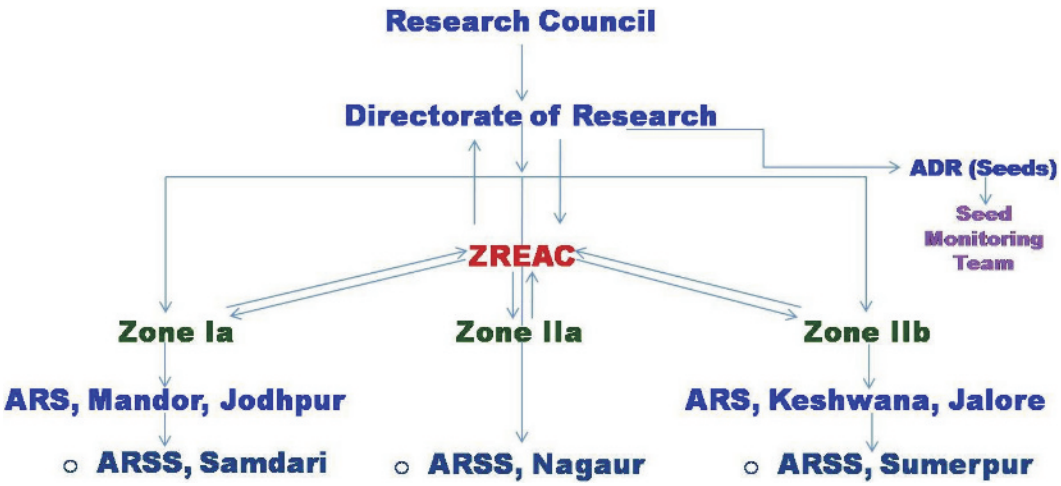


Fig. 2.1: Organizational Setup of Directorate of Research AU, Jodhpur

2.1.2 Research Council

The Research Council (RC) is the highest research body of the University that has the responsibilities and functions of formulating the research policy and providing appropriate directions. The RC is chaired by the Vice-Chancellor and the Director Research serves as Member-Secretary. The other members of RC are All the Directors, Deans, ZDRs and Heads of all the Departments of the University, two eminent scientists and four members from different fields to secure adequate representation of different sectors of agriculture and allied fields.

Nine Research Council Meetings were held during the period for discussion and review of research work done in the University as per given in Table 2.1.

Table 2.1: Research Council Meetings held

Meeting No.	Year	Date of the meeting
I	2016	07th July 2016
II	2017	30th August 2017
III	2019	16th March, 2019
IV	2020	04th June 2020
V	2021	17th March, 2021
VI	2021	24th December, 2021
VII	2022	05th August, 2022
VIII	2023	22nd September, 2023
IX	2024	1st May, 2024

The Additional Director Research (Seeds) is the side wing of Director of Research with mandate to produce and supply the quality seeds i.e. Breeder/Foundation/Certified/TL seed of various *Rabi* and *Kharif* crops to meet out the requirements of seed growers, government agencies like Rajasthan State Seeds Corporation, National Seed Corporation, private seed producing agencies and farmers of Rajasthan as well as other states to some extent.

2.2 Director Research

The University research is guided, monitored and administered by Director Research who is assisted by Additional Director Research (Seeds) at the University headquarter, Zonal Director Research at Agricultural Research Stations and Officer Incharges at Agricultural Research Sub-Stations. The Directorate of Research is headed by Director as per list in Table 2.2.

Table 2.2: List of Director Research

S. No.	Name	Period
1.	Prof. G. N. Parihar	19.10.2013 to 28.02.2014
2.	Prof. B. R. Choudhary	01.03.2014 to 30.08.2019
3.	Prof. Sita Ram Kumhar	31.08.2019 to 31.08.2021
4.	Prof. Ishwar Singh	01.09.2021 to 26.09.2021
5.	Prof. Sawai Dan Ratnoo	27.09.2021 to 12.09.2023
6.	Prof. Sita Ram Kumhar	13.09.2023 to Continue

The research in the University is supported largely by R&D projects sponsored by the State grants AICRPs sponsored by ICAR and *ad-hoc* research projects through other agencies. The major part of research is carried at the two Agricultural Research Stations located at Mandor (Jodhpur) and Keshwana (Jalore) and three Research Sub-Stations located at Sumerpur (Pali), Samdari (Barmer) and Nagaur. The research is partly also supported by College of Agriculture, Jodhpur and Sumerpur through *Ad-hoc* projects and PG students' research.

Research problems in different agro-climatic zones are identified through respective Zonal Research Extension Advisory Committee (ZREAC), which meets once for *kharif* and *Rabi* season crops every year. District wise feedback received from farmers through the Department of Agriculture, GOR and compiled at zone level passed on to ARS for discussion during the ZREAC meetings. The ZREAC consists of scientists of the University, officers from Department of Agriculture/ Animal husbandry & Line Departments, Govt. of Rajasthan, AFRI and ICAR institutes. The researchable issues are discussed and accordingly proposals are formulated and finally problems are resolved through research conducted by the scientists. Research mandates of AICRPs are decided at national level during the Group Meets. Planning and monitoring of *ad-hoc* research projects are made at the level of PI and Unit Head.

In western arid and semi arid regions, water is the most crucial and limited resource. Further available ground water, of which major part (>85%) is brackish, secondly the prevailing climatic conditions are very harsh, that limits agricultural productivity of the region. Due to limited water availability, dry land agriculture is predominantly practiced in *kharif* season taking the main crops like pearl millet, mungbean, mothbean, cluster bean and sesame following conventional practices at large.

Table 2.3: District-wise Major crops

Districts	Major *kharif* crops
Jodhpur	Pearl millet, mothbean, mungbean, clusterbean, groundnut, sorghum, sesame, castor
Barmer	Pearl millet, clusterbean, mothbean, mungbean, castor, sesame,
Jalore	Pearl millet, mungbean, castor, clusterbean, mothbean, sesame
Pali	Sesame, mungbean, sorghum, pearl millet, henna, clusterbean
Sirohi	Castor, maize, pearl millet, sesame, mungbean, clusterbean
Nagaur	Pearl millet, mungbean, mothbean, clusterbean, sorghum, cotton, sesame
Districts	**Major *rabi* crops**
Jodhpur	Cumin, mustard, wheat, isabgol, onion
Barmer	Cumin, isabgol, mustard, wheat
Jalore	Mustard, cumin, isabgol, wheat, taramira
Pali	Wheat, mustard, gram, cumin, taramira
Sirohi	Wheat, mustard, gram, fennel, cumin
Nagaur	Mustard, wheat, isabgol, cumin, fennel, gram, barley

2.3 Research Stations

The DOR has its function through its zone-wise Agricultural Research Stations located at ARS, Mandor, Jodhpur and Agricultural Research Sub Station, Samdari in Zone Ia, Agricultural Research Sub Station, Nagaur in Zone IIa and ARS, Keshwana, Jalore & Agricultural Research Sub Station, Sumerpur in Zone IIb to prepare, plan and perform highly need based research in this acute water scarce but naturally rich bio-diversified zone of the country.

The annual precipitation of this area ranges between 100-600 mm. The six districts of Rajasthan which fall technically under three agro-climatic zones are as under:

- I A: Arid Western Plains – Jodhpur and Barmer district.
- II A: Transitional Plain of Inland Drainage – Nagaur district.
- II B: Transitional Plain of Luni Basin- Pali, Jalore and Sirohi district.

Table 2.4: Area available for Research and seed production under different research stations

Name of Unit	Zone	Total area available (ha)	Area Under cultivation (ha)	Irrigation support (ha)
ARS, Mandor (Jodhpur)	IA	61.12	57.32	57.32
ARSS, Samdari (Barmer)	IA	28.25	18.00	-
ARS, Keshwana (Jalore)	IIB	64.00	54.00	54.00
ARSS/COA, Sumerpur (Pali)	IIB	46.36	41.70	32.00
ARSS/COA, Nagaur	IIA	90.00	80.00	-
	Total	**289.73**	**251.20**	**91.32**

2.3.1 Agricultural Research Station, Mandor, Jodhpur

This station was shifted from ARS, Sumerpur to Mandor in 1983 and located 10 kms away from Jodhpur railway station on NH 62 towards Nagaur and Bikaner.

2.3.1.1 Research Schemes

Presently, there are two All India Coordinated Research Projects, one each on Sesame and Castor and one Network Project on Potential Crops. Besides this, research work on other important crops is also being undertaken to develop production and protection technologies. There are Non-Plan, need based projects and volunteer center for important crops *viz.* Mungbean, Clusterbean, Mothbean, Cowpea, Groundnut, Rapeseed & Mustard, Cumin and Isabgol for strengthening the research of Agriculture University, Jodhpur.

A. ICAR funded projects

AICRPs/AICRN

1. **All India Coordinated Research Project on Sesame & Niger:** This project was started in the year 1968. A total of eight high yielding varieties namely RT 46, RT 54, RT 103, RT 125, RT 127, RT 346, RT 351 and RT 372 and number of production and protection technologies have been developed in this project.
2. **All India Coordinated Research Project on Castor**: This project was started in the year 1998. A total of three high yielding hybrids/varieties namely RHC 1, MCI 8 (Identified) & RHC 2 (Identified) have been developed in this project. In addition to this, a number of production and protection technologies has also been developed.
3. **All India Co-ordinated Research Network on Potential Crops:** This project was started in the year 1996. The mandate crops of this project is improvement in Grain amaranth, Quinoa, Tumba and Kalingda. A total of three high yielding varieties namely RMA 4 and RMA 7 of grain amaranth and T 59 in Tumba have been released and recently two new varieties of rajgira, Jodhpur Rajgira 1 (JR 1) and Jodhpur Rajgira 2 (JR 2) have been identified for release at national level.
4. **AICRP on Pearl millet:** This project was started in the year 1995 under PC Unit located at ARS, Mandor. Under this project four hybrids i.e., MPMH 17, MPMH 21, MPMH 35 and MPMH 42 by PC Unit and one composite variety i.e. MBC 2 under state plan have been developed and release at national level.
5. **State Plan:** Under state plan a total of eight varieties of different crop i.e., one of chia, Jodhpur Chia 1 (JC 1); one of wheat, TJW 153; two of mustard, TJM 1 and TJM 2; two of yellow mustard; Jodhpur Yellow Sarson 1 and Jodhpur Yellow Sarson 2; one of asaliya, Jodhpur Asaliya 1 (JA 1); one of castor RHC 2 were identified for release for cultivation in Rajasthan state.

AICRPs Voluntary centers

1. **AICRP on Seed Spices:** Looking to the major area of seed spices cultivation under the service area of AU, Jodhpur a voluntary center of seed spices was sanctioned in the year 2016. Under this project the research work is being carried out on cumin, fennel and fenugreek. This project is funded by ICAR and State on 75:25 basis.
2. **AICRP on Medicinal & Aromatics Plants:** Arid zone is hub of medicinal plants, however, scientific work was started with the inception of voluntary center of AICRP on Medicinal & Aromatics Plants in the year 2018. Under this project the research work is being carried out on Isabgol, Senna and Asaliya. This project is also funded by ICAR and State on 75:25 basis. In this project a high yielding genotype of Asaliya i.e., MAS 12 has been reported for Identification.
3. Similarly, volunteer centers of AICRP on *Kharif* and *Rabi* Pulses, Rapeseed & Mustard, Groundnut and Wheat are also running at ARS, Mandor.

B. Centrally Sponsored Scheme

1. Mission for Integrated Development of Horticulture (CSS-MIDH)

National Horticulture Mission (NHM) was launched in 2005-06 to increase the growth of horticulture sector by conducting research, technology promotion, post-harvest management, processing and marketing etc. and

to enhance nutritional security. Presently, this project is running at ARS, Mandor through Directorate of Arecanut, and Spices Development, Calicut, Ministry of Agriculture & Farmer Welfare, GOI. In the year 2014, NHM was changed as Centrally Sponsored Scheme on Mission for Integrated Development of Horticulture (CSS-MIDH).

Under this project more than 13 tonnes quality seed of spices *viz*; cumin, fenugreek, coriander, fennel, nigella, dill and chilli was produced during 2013-14 to 2023-24.

Apart from this, seed processing and storage infrastructure facility has been created at different centers of the University.

Seed processing unit (Gravity separator), ARS, Mandor (2014-15)

In the technology transfer a total of 523 FLDs (cumin and fenugreek), 32 farmers training, one skill development training on gardener, one national level, one state level and four district level seminars were conducted during this period.

C. Non-plan (State Govt. funded)

1. Pearl millet
2. Moth bean

Center of excellence on Millets

Looking to the importance of millets State Govt. has sanctioned 5.0 crores to the University for Center of Excellence on Millets in the RKVY component RAFFTAR. Under this center, University has started research work on minor millets viz. finger millet, foxtail millet, proso millet, barnyard millet and little millet with the objective to development of short duration, drought tolerant, high yielding farmers preferred pearl millet hybrids with blast and downy mildew resistance for adaptation to A1 zone of the pearl millet cultivation in India and to develop value added food products from millets based formulations and initiation of contemporary research activities. In this center the laboratories like Food processing lab., Grain quality analysis lab., Molecular biology lab. and Plant breeding lab are being established.

Central Instrumentation Units:

Besides, the laboratories of Pathology and Entomology, well-equipped other lab./ farm-facilities have been established at Agricultural Research Station, Mandor as per details given below:

a. Mid Term Storage Facility: For conserving the important germplasm of different crops from all over the University a MTS Unit has been established at ARS, Mandor.

Table 2.5: Available genetic diversity in different crops

Crop	No. of Germplasm
Sesame	1200
Castor	250
Pearl millet	420
Grain amaranth	200
Quinoa	50
Chia	70
Mustard & Rapeseed	250
Isabgol	60
Cumin	100
Wheat	200
Fenugreek	75

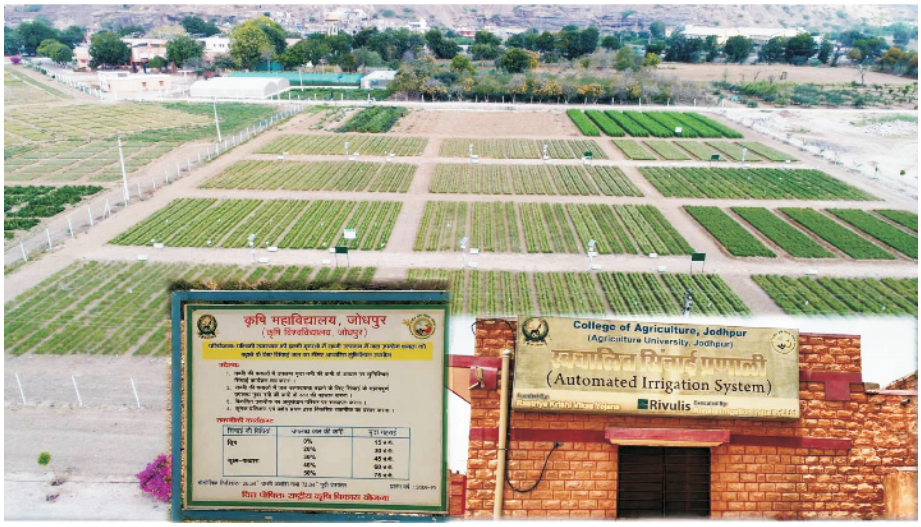
b. **Phyto-Sanitary Laboratory:** This laboratory is a model lab. in the State established to analyze agro-commodities for issuing Phyto-Sanitary certificates. It is equipped with sophisticated equipment like PC based HPLC and GLC, Gas Chromatographer with MS, PC controlled UV-spectrophotometer, Digital X-Ray scanner and Stereomicroscope & compound research microscope etc. Recently a FT-NIR has also been installed in this lab.

c. **Plant Health Clinic:** Plant health clinics are established at ARS, Mandor and KVKs at Jalore & Sirohi under National Horticulture Mission (NHM) for diagnosis of plant samples and to provide consultancies to the farmers.

d. **Water & Soil Testing Laboratory:** This lab is established for analysis of soil, water and plant samples of field experiments. It is well equipped with advanced modern equipments like Automatic Absorption Spectrophotometer (AAS), Nitrogen Analyzer, Ion Analyzer, UV-VI Spectrophotometer and Flame Photometer etc. Sample received from the farmers are also analysed and report is given with recommendations.

e. **Automatic Weather Station:** The station is established in the center of research farm of ARS, Mandor for measuring air and soil temperature, relative humidity, rainfall, evapo-transpiration, wind velocity sun shine hours.

f. **Automatic Irrigation System:** Fully automated sensor based irrigation system through drip and sprinkler as well as flood irrigation has been installed in one ha. Area of research farm at ARS, Mandor under RKVY project sanctioned during 2016-17 with costing of Rs. 22 lakh.



g. **Farm Facility:** University farms at research stations have been mechanized for providing better working environment (farm approach roads, electrification, irrigation facilities, tube wells, implement sheds, stores, threshing floor, boundary walls, seed godowns, seed processing units, farm ponds, polycarbonate mist chamber, training hall, farm implements like shelf propelled vertical reaper, multi-crop thresher, rota-till-drill, back hoe loader, straw reaper, tractors, power tiller, etc.). Installation of Automatic Weather Stations at all research stations are under process.

h. **Model Nurseries:** One project has been sanctioned under RKVY and under this modern nurseries will be established to accommodate budding house, shed net house, poly house, soil sterilization chamber at ARS, Mandor. It will be used for raising plants on commercial basis.

i. **Vermicompost Unit:** A well structured vermi beds of different types of vermicomposting methods have been established at ARS Mandor.

j. **Mushroom Production Unit:** A low cost sustainable and well structured mushroom unit has been established at ARS Mandor.

k. **Water Harvesting Pond:** Water Harvesting Pond of 5 lakh liter water holding capacity is being constructed with the financial support of ICICI Bank Ltd.

2.3.2 Agricultural Research Station, Keshwana, Jalore

This station was established in the year 1988 under National Agriculture Research Project (NARP) funded by ICAR, New Delhi. It is situated on the way from Jalore to Barmer at about 17 km from Jalore city and about 168 km away from University headquarter. Beside non-plan research work one voluntary center for AICRP on Forage crops also running at this station.

2.3.2.1 Farm Facility

ARS, Jalore farm is having the facility of laboratories, implement sheds, farm approach roads, farm implements, stores, threshing floor, seed godowns, farm ponds, training hall, weather stations etc for research work.

2.3.2.2 Goat production Unit

Goat production unit at ARS, Keshwana was established in the year 2018 in collaboration with ATMA, Jalore in a project "Genetic improvement of germplasm of Marwari goat in line growth center with the help of advanced institutional herd". Presently there are 180 goats in this unit. Along with breed improvement, work on conservation of Marwari breed is also being done in the unit. Improved goats are being distributed to the farmers so that Marwari breed can be improved in this area.

2.3.3 Agricultural Research Sub-Station, Sumerpur (Pali)

This sub-station was established in the year 1972 as a sub unit of ARS, Keshwana with a research land of 41.70 ha. This station is having facilities of irrigation through Jawai canal. This station is mainly concerned with the research related to Zone IIb and conducting experiments on different field, vegetables and fruits, beside field crops.

2.3.3.1 Farm facility

ARSS, Sumerpur has facilities of farm approach roads, irrigation, tube wells, implement sheds, stores, threshing floor, seed godowns, seed processing units, farm ponds, training hall, farm implements, Weather Station etc.

2.3.4 Agricultural Research Sub-Station, Nagaur

This sub-station was established in 1993 and it is working under ARS, Mandor situated on the Nagaur-Bikaner highway towards Bikaner.

2.3.4.1 Research Projects

Looking towards the area of pulses in Nagaur district, a voluntary center has been established under AICRP on *Kharif* pulses (Arid legumes).

2.3.4.2 Farm Facility

ARSS, Nagaur is having the maximum research farm area, however, limited irrigation facilities is available due to problem of water salinity. This farm is well mechanized, having farm approach roads, implement sheds, stores, threshing floor, boundary walls, seed godowns, farm ponds, training hall, farm implements etc.

2.3.5. Agricultural Research Sub-Station, Samdari (Barmer)

This sub-station was established in 1998 in Arid Western Plain Zone (IA) of Rajasthan. It is situated near Samdari railway station. It is about 129 km from Barmer district headquarter and 80 km from Jodhpur.

2.3.5.1 Research Projects

Barmer district is having highest area in the country under pearl millet production, hence a voluntary center for testing pearl millet has been established under AICRP on pearl millet. In addition to this, a voluntary center of mothbean under AICRP on *Kharif* pulses is also running at the station.

2.3.5.2 Farm Facility

University farm at ARS Samdari have been mechanized for providing better working environment (farm approach roads, electrification, irrigation facilities, tube wells, implement sheds, stores, threshing floor, boundary walls, seed godowns, seed processing units, farm ponds, polycarbonate mist chamber, training hall, farm implements like shelf propelled vertical reaper, multi-crop thresher, rota-till-drill, back hoe loader, straw reaper, tractors, power tiller, etc.).

2.4 Technologies Developed

2.4.1 Varieties Released/Identified

Since the establishment of the University, four hybrids of pearl millet viz. MPMH 17, MPMH 21, MPMH 35 and MPMH 42 (PC Unit); one variety of sesame RT 372 have been released at national level while two varieties of grain amaranths Jodhpur Rajgira 1 (JR 1) and Jodhpur Rajgira 2 (JR 2) have been identified for release at national level. Eight varieties of different crops such as, two varieties of mustard, TJM 1 and TJM 2; two varieties of yellow mustard; Jodhpur Yellow Sarson 1 and Jodhpur Yellow Sarson 2; one variety of chia, Jodhpur Chia 1 (JC 1); one variety of wheat, TJW 153; one variety of asaliya, Jodhpur Asaliya 1 (JA 1); one hybrid of castor RHC 2 have been identified for release for cultivation in Rajasthan state.

Varieties/hybrids released at national level

Pearl Millet: MPMH 17 (2012)

It is a dual purpose hybrid of pearl millet with high grain and stover yield and it is a cross between ICMA 04999 (female) and a Restorer MIR 525-2 (male). On an average it yields 2835 kg/ha. It matures in 79 days and flowers in 48 days. It produces compact panicles with medium size grains (1000 seed weight - 6.5 g) of globular shape and grey brown colour. The hybrid attains height of 181 cm with spike length of 26 cm.

Pearl Millet:MPMH 21 (2016)

It is a dual purpose hybrid of pearl millet with high grain and stover. It matures in 75 days and flowers in 47 days. It produces compact panicles with medium size grains (1000 seed weight - 7.8 g) of hexagonal shape and grey brown colour. The hybrid attains height of 169 cm and panicle length 20 cm with thickness of 2.6 cm. It has high level of resistance to downy mildew, blast and resistant to smut.

Sesame: RT 372 (2020)

The seeds of this sesame variety are white, its seeds contain 48 percent oil and the 1000 seed weight is 3.1g. It matures in 85 to 87 days. Its average yield is 600-800 kg per hectare. This variety is tolerant or moderately resistant to phyllody, stem and root rot and pod borer and resistant to Alternaria and *cercospora* leaf spot and powdery mildew diseases.

Pearl Millet: MPMH 35 (2022)

This pearl millet variety was developed by the Project Coordinating Unit, All India Coordinated Research Project – Pearl millet

- Seed yield: 2190 kg/ha.
- Dry fodder yield: 5191 kg/ha

  Days to flowering: 43-45
- Maturity Period: 73-76 days
- Iron and Zinc: 46.0 and 35.0 ppm
- Protein and fat: 12.6% and 5.6%

Pearl Millet: MPMH 42 (Shree Anna Bajri 42)

This pearl millet hybrid developed by the Project Coordinating Unit, All India Coordinated Research Project – Pearl millet has been released·

- Seed yield: 2113 kg/ha.
- Dry fodder yield: 5033 kg/ha
- Maturity Period: 74-77 days
- Iron and Zinc: 48.0 and 37.0 ppm
- Highly resistant to Downy mildew
- Highly resistant to Blast
- Tolerant to drought

Grain Amaranth: Jodhpur Rajgira 1 (RMA 62)

Grain Amaranth variety Jodhpur Rajgira 1 of Rajgira has been identified and recommended for timely sown Rabi irrigated conditions with low fertilizer dose for cultivation in Rajasthan, Gujarat, Odisha, Uttar Pradesh and Part of Chhattisgarh at national level. This variety matures in 117-131 days and have following features:

- Average yield: 14.01 q/ha
- 10 ml seed volume weighs: 6.89 - 7.24 g
- Protein content (%): 24.9%
- Oil Content (%): 7.84%
- Lysine content: 5.17%

Grain Amaranth: Jodhpur Rajgira 2 (RMA 120)

Grain Amaranth variety Jodhpur Rajgira 2 has been identified and recommended for the timely sown Rabi irrigated conditions with low fertilizer dose for cultivation in Rajasthan, Gujarat, Chhattisgarh, Jharkhand, Odisha, Maharashtra and Uttar Pradesh at national level. This variety matures in 117-131 days and have following features:

- Average yield: 14.05 q/ha
- 10 ml seed volume weighs: 7.19 - 7.76 g
- Protein content (%): 12.6%
- Oil Content (%): 8.33%
- Lysine content: 4.72%

Varieties/hybrids released/identified at state level

Mustard: TJM 1

This variety of mustard was developed by the joint efforts of Agriculture University, Jodhpur and Bhabha Atomic Research Center. This variety has been identified by the State Variety Evaluation Committee.

- Average yield is 18-20 q/ha
- Maturity Period: 120-125 days
- Oil content: 39-40 %
- 100 seed weight (average): 5.16 g

Mustard: TJM 2

This variety of mustard was developed by joint effort of Bhabha Atomic Research Center and Agriculture University, Jodhpur. This variety has been identified by the State Variety Evaluation Committee.

- Average yield: 18-20 q/ha
- Maturity Period: 120-125 days
- Oil content: 39-39.5 %
- 100 seed weight (average): 5.37g

Castor: RHC 2

This castor hybrid was developed by Agricultural Research Station, Mandor under the All India Coordinated Castor Improvement Project. This hybrid has been identified by the State Variety Evaluation Committee for release in Rajasthan for cultivation.

- Maturity period: 210 days
- Average yield: 37-38 q / ha(irrigated)
- Resistant to root rot and tolerant of leaf hopper

Wheat: TJW 153


This wheat variety was developed by the joint efforts of Agriculture University Jodhpur and Bhabha Atomic Research Center. This variety has been identified by the State Variety Evaluation Committee for release in Rajasthan for cultivation.

- Average yield: 35-42 q/ ha.
- Maturity period: 115-125 days
- 1000 seed weight:42-46 g

Jodhpur Yellow Sarson 1 (RMYS 1)


This bilocular yellow mustard variety was developed by Agricultural University, Jodhpur This variety gives good yield under the conditions of Rajasthan. This variety has been identified by the State Variety Evaluation Committee for release in Rajasthan for cultivation.

- Average yield: 18-20 q/ ha.
- Maturity period: 125-130 days
- 1000 seed weight:5.38 g

Jodhpur Yellow Sarson 2 (RMYS 2)

The tetralocular improved variety of yellow mustard developed by Agriculture University, Jodhpur. This variety has been identified by the State Variety Evaluation Committee for release in Rajasthan for cultivation.

- Average yield: 18-19q/ha.
- Maturity period: 115-120 days
- 1000 seed weight:4.43 g

Chia: Jodhpur Chia 1 (MCS 19)

The improved variety of Chia JC 1 developed by Agriculture University, Jodhpur. This variety has been identified by the State Variety Evaluation Committee for cultivation in Rajasthan.

- Average yield: 7-8 q/ha
- Maturity Period: 128-134 days
- Weight of 10 ml volume: 7.06 g

Asaliya: Jodhpur Asaliya 1 (MAS 12)

The improved variety of Asaliya JA 1 developed by Agriculture University, Jodhpur. This variety has been identified by the State Variety Evaluation Committee for release in Rajasthan for cultivation.

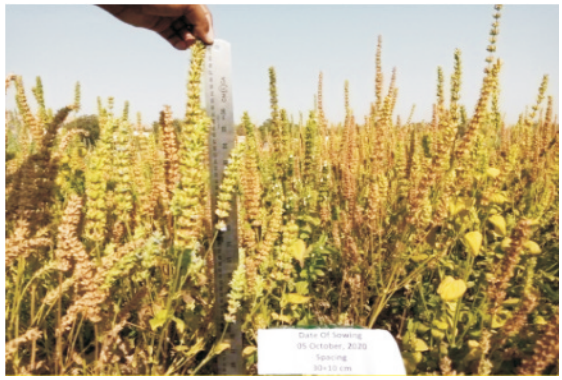
- Average yield:12-13 q/ha
- Maturity period: 115-120 days

2.4.3 New Potential Crops

To meet the challenges of global agriculture scenario, introduction of new crops for diversification has been initiated by Agriculture University Jodhpur. In this regard chia, quinoa, chamomile, dragon fruit, chicory production and protection technologies have been developed by the University.

Crop Production

Agronomy of Chia



University has started research on new potential crops like chia, quinoa, chamomile, Chicory, dragonfruit etc. and incorporated new agronomic practices of chia in pop of *Rabi* 2021-22

- Sowing time: First fortnight of Oct.
- Plant geometry: 30 x 10 cm

Agronomy of Chamomile

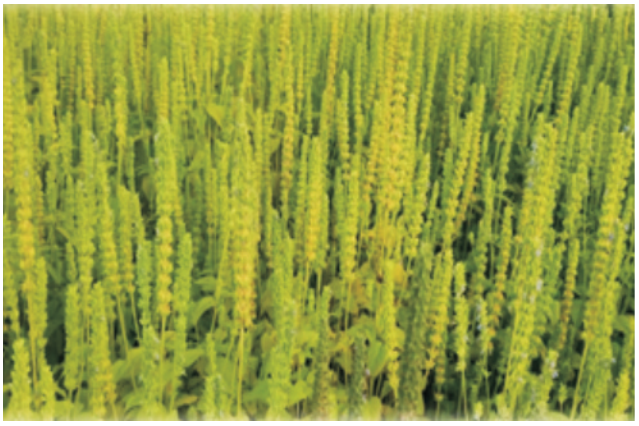
University has also started research on new crop Chamomile and recommended following practices

- Sowing time: 25 October
- Plant Geometry: 40 x 10 cm

Crop Protection

Plant protection measures recommended for chia and asaliya

- Seed treatment with Metalaxyl 5 g/kg seed + foliar spray of Metalaxyl 8% + Mancozeb 64% @ 2 g/l for management of downy mildew of asalia.
- Seed treatment of *T. viride* @ 10 g/kg seed + spray with Pyraclostrobin 133G/L + Epoxiconazole 50 G/L SE @ 1.5 ml/l or seed treatment with carbendazim 50 WP @ 2g/kg seed + Soil application with *T. viride* @ 2.5 kg/ha enriched in 100 kg of FYM + Spray of Pyraclostrobin + Metiram @ 3 g/l against leaf blight and stem rot and root rot of Chia.



2.4.4 Recommendations: Varieties and Technologies included in PoP (Zone Ia and IIb)

Kharif – 2013

Varieties

- Pearl millet: RHB-173, GHB-732 and GHB-744

Technologies

- Sowing of pearl millet at 60 cm row spacing in rainfed condition.
- Foliar spray of 0.2% K_2SO_4 + 100 ppm ascorbic acid at grain development stage in pearl millet under rainfed situation.
- Seed treatment with thiamethoxam 25 WG @ 5 g/kg seeds for management of leaf webber and capsule borer (*Antigastra catalaunalis*) of sesame.
- Dusting of malathion 5% and fenvelerate 0.4% dusts @ 25 kg per ha to manage pod borer in mungbean.

Rabi – 2013-14

Varieties

- Wheat: Raj-4079*
- Chickpea: RSG-895*

Technologies

- Pre-emergence application of pendimethalin CS @ 340 g/ha for weed management in mustard.
- Pre-emergence application of pendimethalin CS @ 480 g/ha followed by weeding at 30 DAS for weed management in cumin.

- Post emergence application of metsulfuron methyl @ 4 g/ha at 30-35 DAS for weed management in wheat.
- Blanket application of 0.1% paraquat (1ml/lit. water) after cutting lucerne and then irrigating the crop 3rd day after treatment for Cuscuta management in lucerne.
- Foliar spray of Zineb 68% + Hexaconazole 4% WP @ 720 g a.i./ha and Metiram 55% + Pyraclostrobin 5% WG @ 1050 g a.i./ha for the management of blight and powdery mildew in cumin.
- Seed treatment with *Trichoderma viride* @ 10 g/kg seed along with soil application of *Trichoderma* culture @ 2.5 kg/ha before sowing followed by three foliar sprays of *Prosopis juliflora* + Tumba + Aak leaves (JTA) in 1:1:1 ratio (10%) against aphids, blight, powdery mildew and wilt diseases of cumin and aphids, downy mildew, Alternaria blight and wilt diseases of isabgol.
- Seed treatment with imidacloprid 70 WS @ 5 g/kg seed to manage termites in wheat.
- Seed treatment with any one of the entomo-phagous fungus, *Beauveria bassiana* / *Metarrhizium anisopliae* @ 10 g/kg seeds and soil application of *B. bassiana*/ *M. anisopliae* @ 10 kg/ha with 125 kg of FYM (in addition to recommended FYM) for incubation of fungus before sowing to manage termites in wheat.
- Application of Thiamethoxam 25%WG @100 g/ha for the control of aphid in fenugreek (not in vegetable type).
- Seed treatment with 20 g phosphorus solubilizing culture per 50 g castor seed + application of 20 kg P_2O_5 for phosphorus management in castor.

Kharif – 2014

Varieties

- Pearl millet: RHB 177, MPMH 17, HHB 197
- Clusterbean: RGC 1038, RGC 1033*

Technologies

- Seed priming with salicylic acid 100 ppm (four hours) followed by foliar spray at grain formation stage for yield enhancement under rainfed condition.
- Application of 15 kg N/ha + 15 kg K_2O/ha + planting at 60 cm + compaction through 4 kg rubber wheel and two dust mulching to enhance water use efficiency in pearl millet.
- Sowing at 60 cm row spacing and foliar spray of 0.2% K_2SO_4 + 100 ppm ascorbic acid in pearl millet under rainfed situation*.
- Castor sowing at 120 cm row and 90 cm plant spacing and application of 20 kg potash/ha to enhance the yield.
- Under drip irrigation system, application of 1/3rd nitrogen as basal and remaining 2/3rd nitrogen in four splits at 30, 70, 90 and 110 DAS for enhancing nutrient use efficiency in castor.
- Seed treatment with Streptocycline (200 ppm for 3 hrs dip) + foliar spray of either copper oxy-chloride (0.3%) or Streptocycline (0.02%) or copper oxy-chloride (0.15%) in association with streptocycline (0.01%) to manage bacterial blight of clusterbean.
- Seed treatment with carboxin 37.5% + tetramethyl thiuram disulfide (TMTD) 37.5% (3 g/kg) or carbendazim 50 WP (2 g/kg) and soil application of *T. viride* (2.5 kg/ha) and two foliar sprays of carbendazim 50 WP (0.1%) was effective to manage root & collar rot diseases of groundnut.
- Soil application of $ZnSO_4$ @ 20 kg/ha + $FeSO_4$ @ 25 kg/ha and super imposed with one foliar spray of $ZnSO^4$ @ 0.5% and $FeSO_4$ @ 0.5% to manage Macrophomina stem & root rot (6.74%) and phyllody (4.63%) incidence in sesame (spray of Zn and Fe on the basis of soil test).

- Seed treatment with Imidacloprid 70 WS @ 7.5 g/kg seed + foliar spray of Imidacloprid 17.8 SL @ 0.25 ml/l or Lambda cyhalothrin @ 1.0 ml/l to manage sesame phyllody incidence.
- Seed treatment with Imidacloprid 70 WS @ 5.0 g/kg seed or entomo-fungus, *Beauveria bassiana or Metarrhizium anisopliae* (any one) @ 10 g/kg seed and soil application of *B. bassiana or M. anisopliae* @ 10 kg/ha cultured in 125 kg FYM to manage termites in groundnut.
- Foliar spray of Acephate 75 SP @ 500 g/ha for management of jassids population in mungbean.

Rabi – 2014-15

Varieties

- Mustard: Pusa Mustard 26, Pusa Mustard 27, NRCHB 101, RGN 145
- Wheat: Raj Molya Rodhak 1, HD 2967, KRL 210, KRL 213, Raj 4120, Raj 4079, Raj 6560
- Barley: RD 2715
- Gram: GNG 1488, RSG 896, GNG 1958, RSG 974
- Onion: RO 252, RO 59, Akola Safed, Bhima Raj

Technologies

- Pre-emergence application of Pendimethalin @ 600 g a.i./ha for weed management in chickpea.
- Post emergence application of Clodinafop Propargyl 15% + Metsulfuron Methyl 1% WP (pre-mixed) @ 60 g a.i./ha at 35 DAS for weed management in wheat.
- Foliar spray of Pyraclostrobin 13.3% + Epiociconozole 5% @ 137.25 g a.i./ha (or commercial product @ 1.5 g/liter of water) to manage blight and powdery mildew in cumin.
- Planting papaya at 2.5 m row and 1.6 m plant spacing for higher yields.

Kharif – 2015

Varieties

- Pearl millet: GHB 905
- Mungbean – IPM 02-3
- Clusterbean – HG 2-20, RGC 1031, RGC 1033

Technologies

- Post-emergence application of Imazethapyr + Imazamox (pre-mixed) @ 40 g/ha at 20 DAS for weed management in clusterbean.
- Post-emergence application of Imazethapyr + Imazamox (pre-mixed) @ 60 g/ha at 20 DAS + hand weeding at 35 DAS for weed management in mungbean.
- Spray of difenoconazole (0.5 ml/l of water) to control alternaria blight of clusterbean.
- Seed treatment with *Trichoderma viride* (10 g/kg) + soil application of *Trichoderma viride* (2.5 kg/ha) + foliar spray of extract of either neem leaf, datura leaf and aak leaf (1:1:1 ratio) 10% or *Prosopis juliflora leaf*, Tumba fruits and aak leaf (1:1:1 ratio) 10% or neem leaf, garlic clove and aak leaf (1:1:1 ratio) 10% + cow urine 10% + neem oil 3 ml/l for management of clusterbean diseases through organic treatments.
- Soil application of gypsum 250 kg/ha + $ZnSO_4$ 20 kg/ha + $FeSO_4$ 20 kg/ha + K_2O 30 kg/ha + *Trichoderma viride* 2.5 kg/ha to manage root rot and collar rot diseases of groundnut (The quantity of this treatment is recommended on soil test value).

- Integration of 75% RDN through inorganic source + 25% through organic for nitrogen management in sesame.
- Cultivation of mungbean at 30 cm row spacing and foliar spray of 0.2% K_2SO_4 + thiourea 1000 ppm to enhance seed yield under heat and moisture stress condition.
- Spray of Acephate 75 SP @ 500 g/ha to control sucking pest in sesame.
- Seed treatment with spinosad 45 SC @ 0.5 ml/kg seed or Deltamethrin 2.8 EC @ 0.4 ml/kg seed for management of red rust flour beetle (*Tribolium castaneum*) in stored sesame (seed purpose only).

Rabi – 2015-16

Varieties

- Mustard: Pusa Mustard 25
- Gram: RSG 945, GNG 1581
- Barley: RD 2794
- Wheat: PBW 590
- Carrot: Pusa Rudhira

Technologies

- Application of 50% RDF through inorganic source + 50% RDF through FYM + Biofertilizer + plant protection measures including bioagents and chemical control + micronutrients including sulphur for integrated nutrient management in mustard.
- 100% FYM equivalent to 100% RDF (N) + Biofertilizer + plant protection through neem based products/ entomogenous fungus/ bio pesticides/ extracts of botanicals/ Gosala products/ predators + gypsum @ 250 kg/ha + 50% RDF (N) through crop residue/ organic waste + tumba cake @ 250 kg/ha + Chemicals through foliage application for integrated nutrient management (INM) in fennel.
- Seed treatment with imidacloprid 600 FS @ 5.0 ml/kg seeds followed by one foliar spray of thiamethoxam 25 WG @ 0.3 g/l or Acetamiprid 20 SP @ 1.0 g/l or Imidacloprid 17.8 SL @ 0.5 ml/l of water to manage aphids in fenugreek.
- Foliar spray of Thiamethoxam 25 WG @ 100 g/ha and Imidacloprid 17.8 Sl @ 150 ml/ha to manage aphid in fennel.

Kharif – 2016

Varieties

- Pearlmillet: MPMH 21
- Mungbean: MH 2-15
- Groundnut: RG 425, Girnnar 2, HNG 123
- Sesame: RT 346*

Technologies

- Spray of Pendimethalin (38.7 CS) @ 500 g/ha at pre-emergence for weed control in clusterbean
- Spray of Pyraclostrobin + Epoxyconazole 1.5 g/l for management of Tikka and Alternaria disease in groundnut.
- Spray of Chlorantraniliprole 18.5 SC @ 0.4 ml/l or Flubendamide 480 SC @ 0.3 ml/l for control of *Antigastra catalaunalis* in sesame

- Spray of Imidacloprid 17.8 SL @ 150 ml for control of sucking pests in sesame.*
- Spray of flonicamid 50% WG @ 200 g/ha for control of sucking pests in mothbean.

Rabi – 2016-17

Varieties

- Mustard : CS 54, NRCDR 2
- Wheat : Raj 4238, GW 11
- Barley : RD 2668
- Gram : RSG 959
- Onion : Hisar Onion 3
- Garlic : Yamuna Safed 9
- Carrot : Pusa Vrashti
- Potato: Kufri Pukhraj, Kufri Surya
- Fenugreek : GM 1, Azad Methi

Technologies

- Application of 15 kg potassium + 10 kg $ZnSO_4$ /ha at the time sowing superimposed with foliar spray of $FeSO_4$ (0.5%) at flowering to enhance seed yield of cumin.
- Foliar spray of salicylic acid @ 100 ppm at pre-flowering stage to enhance seed yield of cumin.
- Application of 30 kg N/ha and use of seed rate @ 75 kg/ha for obtaining higher seed yield of Nagauri methi.
- Foliar spray of Acetamiprid 20% SP @ 100 g/ha for control of aphid in fennel.

Kharif – 2017

Varieties

- Groundnut: RG 510
- Okra: Aprajita, Shakti
- Bottle gourd: USM Shravan, Pusa Naveen

Technologies

- Application of IPM module comprising with seed treatment with Imidacloprid 600 FS (5g/kg seed) + inter cropping with green gram (3:3) along with yellow trap then one foliar spray of Profenofos 0.1% at 30 after sowing to manage *Antigastra*, leaf hopper, whitefly, thrips and gall fly damage in sesame
- Spray of Acetamaprid 20% SP @ 250 g/ha against sucking pest in mungbean.*
- Spray of Imidacloprid @ 250 ml/ha against sucking pest in clusterbean.*

Rabi – 2017-18

Varieties

- Wheat (organic): DBW 88, MP 1201, WH 1124, HI 8713 and DBW 90
- Gram: GNG 2144
- Fennel: GF 12
- Fenugreek: AFG 1

Technologies

- Foliar spray of Acephate 75 SP @ 500 g/ha to manage painted bug in mustard.
- Foliar spray of Imidacloprid 17.8 SL @ 150 ml/ha or Acephate 75 SP @ 500 g/ha to manage aphids in isabgol.
- Ber chapter added in PoP.

Kharif – 2018

Varieties

- Maize: PMH 4*

Technologies

- Application of Sodium aciflourfen 16.5 % + Clodinafop propargyl 8 % (pre-mixed) @ 187.5 g/ha at 15-20 DAS to manage weeds in mungbean.
- Foliar application of NPK (18:18:18) 2% at flower initiation to enhance seed yield of mungbean.
- Seed treatment with *T. viride* + *P. fluorescens* 10 g/kg + soil application of *P. fluorescens* @ 2.5 kg/ha + *T. viride* 2.5 kg/ha enriched in 100 Kg of FYM + neem cake @ 250 kg/ha at sowing to manage *Macrophomina* stem and root rot disease of sesame.

Rabi – 2018-19

Varieties

- Wheat (organic): DBW 88, MP 1201, WH 1124, HI 8713 and DBW 90
- Gram: GNG 2144
- Fennel: GF 12
- Fenugreek: AFG 1

Technologies

- Drip irrigation at 0.6 IW/CPE ratio coupled with 80% RDF through fertigation for better management of water and nutrients in cumin.
- Pruning of plants in mid-June with 30% pruning severity for optimum growth and development of ber plants.
- The herbicides used in mungbean crop viz., Imazethapyr 10% SL, Imazamox 35% WG + Imazethapyr 35% WG, Pendimethalin 30% EC, Pendimethalin 30% EC + Imazethapyr 2% EC and Sodium aciflourfen 16.5% EC + Clodinafoppropargyl 8% EC did not have residual effect on succeeding cumin, mustard and isabgol crops.

Kharif – 2019

Varieties

- Mungbean: GAM 5 and GM 6
- Urdbean: PU 1* and MU 2*

Technologies

- Foliar application of urea 2% + salicylic acid 75 ppm at flower initiation to increase the seed yield of mungbean.
- Application of 25 kg $ZnSO_4$ (heptahydrate) and 25 kg $FeSO_4$ at the time of sowing (soil test need based) to enhance seed yield of sesame.

- Pre-emergence application of Pendimethalin 30 EC + Imazethapyr 2 EC @ 750 g/ha or post emergence application of Sodium aciflourfen 16.5% + Clodinafop propargyl 8% (pre-mixed) @ 180 g/ha at 15-20 days after sowing for weed management in groundnut.
- Foliar spray of Trifloxistrobin 25% + Tebuconazole 50% @ 0.5 g per litre of water to control *Alternaria* leaf spot and powdery mildew diseases of sesame.
- Foliar spray of *Verticilium (Lecanicillium) lecanni* @ 15 g/litre of water to control sucking pests of mungbean.

Rabi – 2019-20

Varieties

- Wheat: Raj 4079
- Mustard: Giriraj, RH 749
- Chickpea: GNG 2171

Technologies

- Application of Pendimethalin 38.7% CS at 677 g a.i./ha as PPI for weed control in cumin.
- Application of RDF + premixed fertilizer containing sulphur 67% WG + zinc 14% @ 10 kg/ha at the time of sowing + top dressing of sulphur 90% WG @ 7 .5 kg/ha at first irrigation (25-30 DAS) for higher yield in mustard.
- Foliar application of *Verticilium (Lecanicillium) lecanni* (cfu 1 x 10^8 per g) @ 5 g/1it. of water for aphid control in mustard, isabgol and cumin.
- Foliar spray of neem leaf solution @ 50% at 70, 85 and 110 days after sowing for management of pod borer in gram.
- Seed treatment with *Tichoderma viride* @ 4 g/kg seed + soil application of *Tichoderma viride* @ 2.5 kg/ha + foliar spray of neem seed kernel extract @ 5% at 60 days after sowing + spray of nimbecidine 1000 ppm @ 1 ml/lit water at 70 and 85 days after sowing for control of powdery mildew in fenugreek.

Kharif – 2020

Varieties

- Castor : GCH 8
- Moongbean: GAM 5*, MH 421*

Technologies

- Application of *Rhizobium leguminosarum* + Ludhiana Nutrient mobilizer (LNm)-16 culture with 100 percent RDF for nitrogen management in mungbean.
- Soil application of 25 kg/ha zinc sulphate (21%) at sowing and foliar spray of ferrous sulphate (19%) at 30 and 45 days after sowing for enhancing yields in pearl millet.
- Application of foliar spray of Salicylic acid @ 100 ppm at 30 days after sowing for enhancing seed yield of rainfed sesame.
- Seed treatment of thiram 37.5% + carboxyl 37.5% (pre-mixed) @ 2g/kg seed against dry root rot in mothbean.
- Soil treatment of *Trichoderma viride* @ 2.5 kg /ha in 100 FYM against dry root rot in clusterbean.

- For the management of white grub within 21 days of maximum emergence of beetles on first monsoon or pre-monsoon rains, mix Imidacloprid 17.8 S.L. @ 300 ml/ha in dry soil then broadcast in the field followed by light irrigation.
- Foliar application of *Verticillium lecanii (Lecanicillium lecanii)* @ 10 g/l in cluster bean and sesame against whitefly, jassid and aphids.
- Application of pendimethalin 30 EC @ 0.75 kg a.i./ha (pre-emergance) and quizalafop ethyl 10.8 EC @ 40 g a.i./ha (Post emergence) at 20 DAS for weed control in sesame.
- Seed treatment with Imidacloprid 70% WG @ 70% WG @ 5 g/kg seed + spray of Imidacloprid 17.8 % SL @ 2 ml/10 lit. against phyllody in sesame*.
- Application of vermicompost as per soil health card recommendation + Panchgavya @ 4% at 15, 30 and 45 DAS for enhancing seed yield of organic mungbean*.
- Foliar spray of 7 leaves *kadha* @ 75 liters in 500 liters of water/ha at 50, 60 and 70 DAS for minimizing pest (web worm) infestation in organic sesame, mungbean and clusterbean*.

Rabi – 2020-21

Varieties

- Mustard: Giriraj and RH-0749*
- Brinjal: SC-627B*
- Wheat: HI-1605

Technologies

- Intercropping of cumin + isabgol in row ratio of 4:4 for reducing risk in cumin under aberrant weather conditions.
- Application of RDF + pre-mixed fertilizer containing sulphur 67% WG + zinc 14% @ 10 kg/ha at sowing followed by sulphur 90% WG @ 7.5 kg/ha as top dressing at first irrigation (25-30 DAS) to maximize seed yield of cumin.
- Seed treatment with *Trichoderma viride* 4 g/ha + soil application of *Trichoderma viride* 2.5 kg/ha + foliar spray of NSKE @ 5% at 60 DAS and foliar spray of neem oil @ 1.5% at 70 & 85 DAS for disease management in organic fenugreek.
- Application of vermicompost @ 2.0 t/ha + vermiwash @ 10% at 20, 40 and 60 DAS for nutrient management in organic chickpea.
- Application of bio-agent (*Beauveria bassiana* @ 1×10^8 spores/g) @ 7.5 g/l as foliar spray at 45 and 60 DAS for pest management in chickpea.
- Foliar spray of *Verticilium (Lecanicillium) lecanii* (1×10^8 spores/g) @ 5.0 g/l or foliar spray of 7 leaves *Kadha* @ 1.0 liter in 6 liter water at the time of appearance and repeated spray at 15 days interval to minimize aphid infestation in mustard.
- Foliar spray of *Verticilium (Lecanicillium) lecanii* (1×10^8 spores/g) @ 5.0 g/l at the time of appearance and repeated spray at 15 days interval to minimize aphid infestation in isabgol.

Kharif – 2021

Varieties

- Sesame: RT 372
- Mungbean: GM-6*
- Napier grass: CO-4* and CO-5*

Technologies

- Foliar application of GA_3 @ 30 ppm at flowering and pod initiation stage for seed yield improvement in mungbean.
- Application of seed rate @ 125 kg/ha in spreading type and 150 kg/ha in bunch type groundnut for higher yields.
- Soil application of neem cake @ 250 kg/ha at sowing + seed treatment with *Trichoderma viride* 10 g/kg seed + foliar application of Pyraclostrobin 13.3 g/lit. + Epoxiconazole 50 g/l SE @ 1.5 ml/l of water for integrated disease management in mungbean.
- Foliar spray of 200 ppm GA_3 + 100 ppm NAA at 4 leaf stage for yield improvement in okra*.
- Foliar spray of 200 ppm GA_3 + 50 ppm NAA at 4 leaf stage for yield improvement in vegetable purpose cowpea*.
- Foliar spray of 100 ppm GA_3 + 200 ppm NAA at 4 leaf stage for yield improvement in vegetable purpose clusterbean*.
- Application of *Jivamrit* @ 500 l/ha for nutrient management in organic mungbean*.

Rabi – 2021-22

Varieties

- Yellow Sarson: YSH 0401

Technologies

- New chapter on chia crop (*Salvia hispanica*) with suitable sowing time (First fortnight of October) and plant geometry (30 x 10 cm) was added in PoP.
- Application of Oxyflourfen @ 200 g/ha at 8 days after sowing for management of wild onion (Pyaji –*Ashphodelus tenuifolius*) in cumin.
- Three foliar spray of Hexaconazole 5 EC @ 1 ml/l + two foliar spray of Thiamethoxam 25 WG @ 0.3 g/l for integrated pest and disease management in cumin.
- Seed treatment with Carboxin 37.5% + Thiram 37.5% (pre-mixed) @ 2 g/kg + soil application of *Trichoderma viride* @ 2.5 kg/ha + spray of Captan 70% + Hexaconazole 5% (pre-mixed) @ 1 g/l for integrated diseases management in fenugreek.
- Seed treatment with *Trichoderma viride* @ 10 g/kg seed + soil application of *T. viride* @ 2.5 kg/ha enriched in 100 kg FYM + neem cake @ 250 kg/ha at sowing + foliar spray of Azoxystrobin @ 500 ml/ha for integrated management of wilt and downy mildew in isabgol.

- Application of Fluopyram 400 SC @ 625 ml/ha as soil drenching within 1-2 days after defoliation and second treatment applied at 45 days after first application for nematode management in pomegranate.
- Pre-emergence application of Pendimethalin @ 600 g a.i. + Oxyflurofen 55 g/ha for weed control in cumin*.
- Post emergence application Sulfosulfuron @ 30 g/ha at 20 DAS for weed control in isabgol*.
- Foliar spray of Tebuconazole 25% @ 500 g/ha and Pyraclostrobin 133g/l + Epoxiconazole 50 g/l (pre-mixed) @ 750 g/ha for blight management in cumin*.
- Application of 80% of NPKS through drip irrigation (2.5 hour) at an average interval of 2.5 days for yield improvement in onion*.
- Pre-emergence application of Metalachlor 50 EC @ 1000 g a.i./ha for weed control in chickpea*.
- Application of 75% RDF followed by foliar spray of 2% urea at 45 DAS to increase the yield of fodder oat*.

Kharif – 2022

Varieties

- Mothbean - RMO 2251
- Mungbean - Keshwanand Mung-1

Technologies

- Foliar application of *Jiwamrita* (10%) solution at 30 days after sowing for yield improvement in mungbean.
- Seed treatment with *Trichoderma* sp. @ 10 g/kg + furrow application of enriched *Trichoderma* (2.5 kg *Trichoderma*+100 kg vermicompost) @ 250 kg/ha and spray of combi-product (Tebuconazole 50% + Trifloxystrobin 25%) @ 0.5 g/l at 30-35 DAS and second spray at 50-60 DAS for management of major diseases of sesame.
- Application of Indoxacarb 14.5 SC @ 500 ml/ha against pod borer in mungbean.
- Application of Pyraclostrobin 133G/L + Epoxiconazole 50 G/L SE @1.5 ml/l against *Cercospora* leaf spot disease management of mothbean.
- Foliar spray of Tebuconazole 250 EC @ 0.1% against Alternaria blight of clusterbean.
- Seed treatment with combi product Azoxystrobin 2.5% SC + Thiomethoxam 25% FS + Thiophenate Methyl 11.25% WP @ 100 ml/10 kg seed against diseases and insects of groundnut.
- Use of Anti-insect net shading for preparation of *Kharif* Onion nursery.
- Application of 120 N:60 P: 60 K: 30 S kg/ha for higher production of onion*.
- Stump planting of 8-9 mm thickness with 20-25 cm stump plant (2-5 cm stem and 15-20 cm tap root) for achieving enhanced growth in *Tecomella undulata**.
- Application of Pyraclostrobin 133g/l + Epoxiconazole 50 g/l SE or Tebuconazole 50% + Trifloxystrobin 25% WG @ 0.1% to manage foliar disease in sesame*.
- Application of Fomesafen 11.1% + Fluazifop p-butyl 11.1% SL (pre-mixed) @ 220 g a.i./ha and Propaquizafop 2.5% + Imazethapyr 3.75% (pre-mixed) @ 135 g a.i./ha at 20 DAS for weed management in mungbean*.
- Application of *Beauveria bassiana* (1 x 10^8 spore/ml) @ 5 g/lit. (500 lit. water/ha.) against web worm (Antigastra sp.) in organic sesame cultivation.

Rabi – 2022-23

Varieties

- Chick pea: CSJ-515*

Technologies

- The date of sowing on 25 October and crop geometry at 40 cm x 10 cm was recommended for Chamomile cultivation.
- Seed treatment with carbendazim in 2 g/kg seed + foliar spray of Metalaxyl 8% + Mancozeb 64% @ 2 g/l + foliar spray of Trifloxystrobin + Tebuconazole @ 0.5g/l for management of sclerotinia rot and white rust in mustard.
- Seed treatment with *T. viride* @ 10 g/kg seed + soil application with *T. viride* @ 2.5 kg/ha enriched in 100 kg of FYM + 250 kg/ha neem cake at sowing + foliar spray with Pyraclostrobin 133G/L + Epoxiconazole 50 G/L SE @ 1.5 ml/l for control of blight and root rot in chickpea.
- Seed treatment with Metalaxyl 5 g/kg seed + foliar spray of Metalaxyl 8% + Mancozeb 64% @ 2 g/l for management of downy mildew of asalia.
- Seed treatment of *T. viride* @ 10 g/kg seed + spray with Pyraclostrobin 133G/L + Epoxiconazole 50 G/L SE @ 1.5 ml/l or seed treatment with carbendazim 50 WP @ 2g/kg seed + Soil application with *T. viride* @ 2.5 kg/ha enriched in 100 kg of FYM + Spray of Pyraclostrobin + Metiram @ 3 g/l against leaf blight and stem rot and root rot of Chia.
- Seed treatment with carbendazim 50 WP @ 2 g/kg seed + soil application with *T. viride* @ 2.5 kg/ha enriched in 100 kg of FYM + spray of Trifloxystrobin 25% + Tebuconazole 50% @ 0.5 g/l for management of *Fusarium* wilt and Alternaria blight of cumin.
- Foliar spray of Kresoxin Methyl 15% + Chlorothalonil 56% WG (pre-mixed) @ 1250 g/ha against blight and powdery mildew on cumin.
- Soil application of neem cake @ 150 kg/ha + foliar spray with cow urine @ 10% + foliar spray of NSKE @ 5% for management of aphid in mustard and isabgol.
- Foliar application of Pyraclostrobin 133 g + Epoxiconazole 50 g/l SE @ 0.1% and Hexaconazole @ 0.1% for management of powdery mildew in mustard and fenugreek*.
- Soil application of fipronil 0.3 G @ 25 kg/ha during field preparation + seed treatment with imidacloprid 17.8 SL @ 2 ml/kg seed or Fipronil 5 SC @ 6 ml/kg seed + soil application of Imedacloprid 17.8 SL @ 500 ml/ha after 60 DAS for termite management in wheat and barley.*
- Foliar spray of GA_3 100 ppm at flowering and pod initiation stage or NAA 100 ppm at flowering and pod initiation stage yield improvement in chickpea*.
- Application of N @ 125 kg + P_2O_5 @ 60 kg + K_2O @ 50 kg + Sulphur @ 20 kg/ha and sowing at crop geometry of 60 cm x 60 cm for yield improvement in cabbage*.
- Application of neem cake @ 20 kg + *Paecilomyces lilacinus* @ 20 kg/ha at the time of pruning (near the root zone) for root knot nematode in pomegranate*.

- Integrated farming system of 1.0 ha area comprising 70 percent under crops, 27 percent in fruits and vegetable, 3.0% for livestock and boundary plantation of *Ailanthus excelsa* (Ardu) was recommended for more benefits as compared to growing crops only*.
- Appliaction of Etheral @ 4 ml/l during 1st and 2nd week of January for defoliation in lasoda (*Cordia myxa*).*

Kharif – 2023

Varieties

- Mung bean: GM-7* and IPM 205-07*

Technologies

- Recommended Jute bag and Anti-insect net as shading material for raising nursery of *Kharif* onion.
- Application of 75% RDN through urea (50% basal and 25% as top dressing at 25-30 DAS) + two foliar spray of nano urea (2 ml/1 of water) at 35-40 and 45-50 DAS was found as effective as 100% RDF for enhancing yields of pearl millet.
- Foliar spray of Tebuconazole 50% + Trifloxystrobin 25% WG @ 0.1% for management of cercospora leaf spot disease of mungbean.
- Soil treatment with BARC-Trichoderma formulation @ 2.5 kg/ha enriched in 100 kg of FYM against soil borne diseases of clusterbean.
- Foliar spray of *Verticilium (Lecanicillium) lecanii* (1×10^8 spores/g) @ 5.0 g/l against sucking pests in mungbean and culsterbean*.
- Foliar application of Pyraclostrobin 133 g/l + Epoxiconazole 50 g/l w/w SE @ 0.1% against Cercospora leaf spot diseases in mungbean*.
- Application of Emmamectin benzoate 5 SG @ 0.5 g/l and Cholrantraniliprole 18.5 SC @ 0.2 ml/l for control of sesame leaf and capsule borer (*Antigastra catalaunalis*) and pod borer of mungbean*.
- Foliar application of 0.5% $ZnSO_4$ at 25 DAS + 0.5% $FeSO_4$ at 35 DAS to increase green and dry fodder yields of sorghum*.

Rabi 2023-24

Varieties

- Barley: RD 2907
- Wheat: DWRB 137 (for saline and salty soils)
- Wheat: HI 1605*
- Mustard: RH 725*

Technologies

- The most suitable and profitable cropping sequence for cumin is Pearl millet-cumin.
- Foliar spray of 0.4% ZnSO4 + 0.4% FeSO4 at 60, 75 & 90 DAS for higher production in fennel.
- Application of Carfentrazole-ethyl 20 g ai/ha (25-30 DAS) for weed management in wheat.

- Seed treatment with Tebuconazole + Trifloxystrobin (premixed) 75% WG @ 0.4 g/kg for wilt and root rot disease management in castor.
- Soil application of BARC-Trichoderma formulation @ 2.5 kg/ha enriched with 100 kg FYM for management of soil borne diseases in cumin and soil & seed borne diseases in chickpea.
- Foliar spray of Difenoconazole 25% EC @ 0.5 ml/l (250 ml/ha) for management of Alternaria blight in cumin.
- Foliar spray of Trifloxystrobin 25% + Tebuconazole 50% (premixed) @ 0.5 g/l for management of blight and powdery mildew in cumin.
- Seed treatment with Azoxystrobin 23 SC @ 1 ml/kg seed + soil drenching with Azoxystrobin @ 1 ml/l water for management of cumin wilt.
- Diclosulam used as a pre-emergence herbicide in *kharif* groundnut crop did not have residual effect on succeeding wheat crop.
- Soil application of neem cake @ 150 kg/ha + foliar spray of cow urine @ 10% + foliar spray of NSKE @ 5% for management of aphid in cumin.
- Spray of Flonicamid 50% WG @ 0.3 g/l for the management of aphid in cumin.
- Application of 150 kg N/ha, 50 kg P_2O_5/ha and 50 kg K_2O/ha for nutrient management in Napier and post emergence application of 2, 4-D @ 0.5 kg a.i./ha at 25 days after transplanting for weed management in Napier.*
- Remedy prepared from 250 ml mustard oil + 50 g termeric + 50 g common salt + 50 g antiseptic cream for management of contagious ecthyma (orf) disease in Sheep and Goat.*

Kharif 2024

Varieties

- Pearl millet: MPMH 35
- Groundnut: RG-559-3 & RG-578
- Sesame: RT 372*

Technologies

- In mungbean, application of Fomesafen + Fluzifop p butyl @ 220 g/ha at 20 DAS (ready mix) as post emergence herbicide found effective.
- In mungbean, foliar spray of NPK (18:18:18) @ 2% + $ZnSO_4$ @ 0.5 % at pre flowering and pod initiation stage was found most effective for yield maximization.
- In pearl millet, soil application of neem cake @ 250 kg/ha at the time of sowing + 10% higher seed rate + seed treatment of imidacloprid 600 FS @ 8.75 ml/kg seed + PSB @ 10 ml/kg seed + removal of shoot fly dead hearts + installation of fish meal trap @ 10/ha + spray azadirachtin 1500 ppm (40 ml/10 litres of water) at 30 DAG and ear head stage for the management of shoot fly incidence.
- In sesame, seed treatment with Carbendazim @ 3g/kg – three sprays of (Tebuconazole 50% + Trifloxystrobin 25%) @ 0.5 g/l at 30, 45 and 60 days at 15 days interval reduces percent disease incidence of Macrophomina stem & root rot and percent disease intensity of powdery mildew.
- Soil application of 25 kg ZnSo4 + 15 kg FeSo4 per ha in mungbean before sowing for higher yield.*

- The chapter for management of blast disease in pearl millet along with management. The foliar spray of Propiconazole 25 SC @ 1 ml/litre or Tebuconazole 50% + Trifloxystrobin 25% WG or Hexaconazole 5% EC gave higher yield and low PDI.*
- The chapter for management of armyworm in maize along with management. The foliar spray of Chlorantraniliprole 18.5 SC @ 0.4 ml/litre or Emamectin benzoate 5 SG @ 0.5 g/litre or Indoxacarb 14.5 SC @ 1.0 ml/litre or Profenofos 50 EC @ 2 ml/litre for higher yield and minimum insect attack. *
- Foliar spray of Diafenthiuron 50% SP @ 1 g/litre or Acetamiprid 20% SP @ 0.3 g/litre against sucking pests (thrips & whitefly) of chilli as it gave higher yield with minimum insect attack.*

***Indicate technology developed for Zone IIB**

2.4.5 Testing of new agro-chemicals/varieties/hybrids

Different types of agro-products including seeds, herbicides, pesticides, fertilizers, plant growth regulators etc. submitted by different private companies/govt. undertakings/manufactures for their testing to the university have been tested at different units and University has received a sum of Rs. 474.25 Lakh as testing fees (Table 2.6).

Table 2.6: List of companies and chemical tested along with testing fee received

S.No.	Company	Product	Date	Centre	Testing Fee (In lakh)
		2014-15			
1.	Bayer	Bajra hybrid XMT-1358	15.7.2014	ARS, Mandor	3.0
	Total				3.0
		2015-16			
2.	Bayer	Bajra hybrid 9450	5.9.2015	ARS, Mandor	3.0
3.	Rallis	Growth promoter Tata Bahas in Cumin	19.10.2015	ARS, Mandor	1.5
	Total				**4.5**
		2016-17			
4.	Ajeet	Cotton BT	23.6.2016	ARS, Mandor	3.0
5.	Bayer	Bajra hybrid XMT-1358	23.6.2023	ARS, Mandor	3.0
6.	Ankur	Cotton BT hybrid ankur 4252 BG II & Ankur 216 BG II	23.6.2023	ARS, Mandor	3.0
7.	SNF India Pvt. Ltd	AQUA SORB, Peral millet & Clusterbean	4.7.2016	ARS, Mandor	3.0
8.	Sulphur Mills Ltd	Fertis (A fertilizer with elemental sulpher 90%) Mustard, Cumin	27.10.2016	ARS, Mandor	3.0
9.	Bayer	Natiro 75 WG on cumin & Solomon 3000D on Wheat	12.1.2017	ARS, Mandor	6.0
10.	Bayer	Proagro 5222 Proagro Kesasi Gold	12.1.2017	ARS, Mandor	3.0
11.	Rallis India Ltd.	Taqat 75& W.P. Cumin	12.1.2017	ARS, Mandor	1.5
	Total				**25.5**

S.No.	Company	Product	Date	Centre	Testing Fee (In lakh)
		2017-18			
12.	SNF India Pvt. Ltd	AQUA SORB, Peral millet & Clusterbean	25.7.2017	ARS, Mandor	3.0
13.	Lucid colloids Ltd	Flavorin Agro Complete Clusterbean	6.10.2017	ARS, Mandor	1.5
14.	Sulphur Mills Ltd	Fertis, Cumin, Mustard	5.10.2017	ARS, Mandor	3.0
15.	UPL Ltd.	DOST Super (PendimeThalin 38.7% CS)	31.10.2017	ARS, Mandor	6.0
16.	Rallis India Ltd.	Taqat 75 & W.P. Cumin	15.11.2017	ARS, Mandor	1.5
17.	Bayer	Mustard hybrid 5222 for 2nd Year	29.10.2017	ARS, Mandor	1.5
18.	Willowood Chemical Pvt.	Pyraclostrobin 133g/1+expoxiconazole 50g/I SE on groundnut Maize cumin	8.1.2018	ARS, Mandor	9.0
19.	Cytrozyme Las Ius, USA	SDMACRO, Cumin	10.1.2018/6.8.2018	ARS, Mandor	1.5
	Total				**27.0**
		2018-19			
20.	UPL Ltd.	Testing of Dost Super against weed flora of succeeding crops study (Cumin)	12.6.2018	ARS,Mandor / Keshwana	3.0
21.	UPL Ltd.	Metolachor 50% EC Maize, GPF 215- chilli against anthracnose, PM, Choanephora blight and Cercospora leaf spot	12.6.2018	ARS Mandor & ARSS Sumerpur	7.5
22.	UPL Ltd.	UPL 116 Groundnut, UPL 116 Maize	5.7.2018	ARS Mandor & ARSS Sumerpur	6.0
23.	Bayer Crop Sci. Ltd	Chlorantraniliprade 18.5% SC- Cabbage, and Bengal gram Emamectin benzoate 5% SG- Brinjal, Chickpea	29.9.2018	ARS, Mandor	6.0
24.	Lucid colloids Ltd	Effect of Flavorin Agro Complete on growth and yield of guar (Clusterbean)	30.10.2018	ARS, Mandor	1.5
25.	Sulphur Mills Ltd	Evaluation of Fertis, Turbo ZS on nutrient uptake, growth, yield and quality parameters in Cumin	1.11.2018	ARS, Mandor	1.5
26.	Bayer Crop Sci. Ltd.	Spirotetramat 30g/1+Diafemthiuron 120g, Cotton & Chilli	13.11.2018	ARS, Mandor	6.0
27.	Cytozyme lab Inc, USA	SDMACRO & Crop +2N Nacarena in cumin	1.3.2019	ARS, Mandor	1.5
	Total				**33.0**

S.No.	Company	Product	Date	Centre	Testing Fee (In lakh)
		2019-20			
28.	SNF India Pvt. Ltd.	FLOBOND DI 2010 Tomato	3.4.2019	ARS Mandor	2.50
29.	UPL Ltd., Mumbai	UPH-515 non crop area	10.4.2019	ARSS Sumerpur	5.00
30.	UPL Ltd., Mumbai	GPH-0319 non Crop Area	17.7.2019	ARS Mandor	5.00
31.	Bayer Crop Science	Fluopyra 400 SC (Velum Prime) Pomegrante-Two Season	1.8.2019	CoA Nagaur	10.00
32.	Rallis India Ltd.	Rallis Fungicide Pre misture Sarthak (Kresoxim methyl 15% +Cholorothalonil 56% WG and Rallis new fungicide RIL-243/CF (50% WG) for its bio efficacy against effect on cumin (Two years)	26.11.2019	ARS Mandor	10.00
33.	UPL Ltd. Mumbai	GPI 418 for Tomato, Chickpea Mancozeb 75 WP on Cumin	26.12.2019	ARS Mandor & Jalore	15.00
	Total				**47.5**
		2020-21			
34.	UPL Ltd.	Bioefficacy evaluation of insecticide UPI 120 on sucking pests of cotton	23.5.2020	ARS, Mandor	5.0
35.	Bayer Crop Science Ltd	Spirotetramat 30g/1+Diafemthiuron 120g, SCI in Chilli	26.5.2020	ARS Mandor	1.5
36.	Indofil Industries Ltd.	Evaluation of Bio-efficacy & Phytotoxicity of Zineb 75% WP against diseases of Cumin	15.6.2020	ARS, Mandor	5.0
37.	UPL Ltd. SWAL Corp	GPF-219 for testing on evaluation the bioefficacy and phyto-toxicity of GPF-219 against the disease complex of chilli	18.8.2020	ARS, Mandor	5.0
38.	UPL Ltd.S WAL Corp	GPF -219 evaluation of bioeffiency and phyoto-toxicity of GPF-219 against the disease complex chilli	21.8.2020	ARS, Mandor	5.0
39.	Bayer Crop Sci. Ltd.	Solomon 300 OD (Beta-Cyfluthlin + Imidacloprid 8.49 +19.81% w) for testing on evaluation the efficacy' and phyto-toxicity and natural enemies of insecticide in Cumin.	7.10.2020	ARS, Mandor	5.0
40.	Corteva Agriscience Ltd.	Evaluation of Mustard Hybrid 45542 CL for tolerance against Orobanche	28.10.2020	ARS, Mandor	5.0
41.	UPL Ltd.	GPI-418 Evaluation bioeffcacy and phytotoxicity of GPI-418 against inset pests of chilli	25.11.2020	ARSS Sumerpur	5.0
	Total				**36.5**

S.No.	Company	Product	Date	Centre	Testing Fee (In lakh)
		2021-22			
42.	Indofil Industries Ltd.	Evaluation of bioefficay and phytotoxicity of impression against diseases of cumin	4.6.2021	ARS, Mandor	5.0
43.	Bayer Crop Science Ltd	Bay gola alege-test protocol for evaluation of ambitions as aa bio stimulant in chilli	17.6.2021	ARS, Mandor	2.5
44.	Bayer Crop Science Ltd	Baygloan Alage in Pomegrnate	17.6.2021	ARSS, Sumerpur	2.5
45.	Bayer Crop Science Ltd.	Evaluation of Ambition as a bio stimulant in Pomogrante	19.6.2021	ARSS, Sumerpur	2.5
46.	Bayer Crop Science Ltd.	Tiviant Bio efficacy and phyo-toxicity studies with Isotianil 7 % + Fosetyl Al 70 % WG (Tiviant) of Fungicide in Pomegranate	2.7.2021	ARS, Mandor	5.0
47.	Bayer Crop Science Ltd.	Luna sensation efficacy and phyto-toxicity studies of Flupyram 250 + Trifloxystrobin 250 gil SC (Luna sensation) in Pomegranate	2.7.2021	ARS, Mandor	5.0
48.	Bayer Crop Science Ltd.	Glyphosate efficacy, phyto-toxicity and Succeeding crop studies with Glyphosate IPA Salt 41% SL Pomegranate	10.8.2021	ARS, Mandor	5.0
49.	Corteva Agriscience Ltd.	Evaluation Musturad hybrid 45542 orobanche	26.10.2021	ARS, Mandor	2.5
50.	Rajasthan State Mines & Minerals Limited, Udaipur	Efficacy & evaluation of Partially Acidulated Plant tailings in Wheat Crop. MEG-PHOS (Photostatic fertilizer)	20.11.2021	ARS, Mandor	5.0
51.	Khandelwal Biofertilizer ltd.	ICAR Fusicont Bio-Raj for bio-efficacy evaluation for the product ICAR Fusicont Bio-Raj in cumin	20.11.2021	ARS, Mandor	2.5
52.	Jiva Agro Ltd. Mumbai	Rapigro GR) for evaluation of growth yeild and quality in cumin	6.1.20222		2.5
53.	PI Industries Pvt. Ltd.	To evaluate impact of BIOVITA Gr on growth, yield and quality of Chilli	6.1.2022	ARS, Mandor	2.5
	Total				**47.5**
		2022-23			
54.	Gharda Chemicals Ltd.	Bio efficacy evaluation against diamond back moth in cabbage	18.5.2022	ARSS, Sumerpur	5.0
55.	Gharda Chemicals Ltd.	Bio efficacy of cholratrahiliporle against fruit borer and major diseases of chilli	18.5.2022	ARSS, Sumerpur	5.0

S.No.	Company	Product	Date	Centre	Testing Fee (In lakh)
56.	Gharda Chemicals Ltd.	Efficacy evaluation mestrione against brand leaf weeds of Maize and its residual effect	18.5.2022	ARSS, Sumerpur	6.0
57.	PI Industries Pvt. Ltd.	PIX 10082 Chilli And Tamato	12.7.2022	ARS, Jalore and KVK, Jalore	10.0
58.	PI Industries Pvt. Ltd.	To evaluate impact of BIOVITA Gr on growth, yield and quality of Chilli	28.7.2022	ARS, Mandor	2.5
59.	Bayer Cropscience Ltd	Bioefficacy phytotoxicity plupyram 400 G/L SC (Velu Prime) on guava Against root knot namatode	16.8.2022	KVK Sirohi	10.0
60.	M/s Syngenta India Pvt. Ltd.	Insecticide & fungicide molecules Actara 25 WG score Aistar Against cumin through drone one season	10.10.2022	ARS, Mandor	24.0
61.	M/s Syngenta India Pvt. Ltd.	Bio efficacy & Phytotoxicity effects of insecticides molecules of Cruiser 35 FS in Cumin	10.10.2022	ARS, Mandor	5.0
62.	M/s Syngenta India Pvt. Ltd.	Bio efficacy & Phytotoxicity evaluaion on fusilable on onion two season	11.10.2022	ARS, Mandor	5.0
63.	M/s Syngenta India Pvt. Ltd.	Bioefficacy on garlic	12.10.22	ARS, Mandor	5.0
64.	Rainbow Agro sciences Pvt Ltd	Pyraclostrobin l33g/1 + Epoxiconazole 50g/l SE for evaluation Bio-efficacy & Phytotoxicity effects on Cumin	13.10.2022	ARS, Mandor	5.0
65.	Rajasthan State Mines & Minerals Limited, Udaipur	Photostatic fertilizer of wheat one season with two location	13.10.2022	ARS, Mandor and ARSS Sumerpur	5.0
66.	Corteva Agriscience	Mustad hybrid 46542 for toleance aginst orobanche (third year)	13.10.2022	ARS, Mandor	2.5
67.	Bayer Crop Sci. ltd.	Bioefficacy evaluation tetramiliprle 200 G/I (vayego) on black gram and spirotetramat 150 G/L OD (Novento) on pomegranate	15.10.22	ARS Mandor	11.0
68.	Rainbow Agrosciences Pvt Ltd	Metalaxyl 35% - Mustard	1.11.2022	ARS, Mandor	5.0
69.	UPL Ltd.	To Evaluate the Bio-efficacy and Phytotoxicity of fungicide GPF-1215 against powdery mildew disease of Cumin	3.12.2022	ARS, Mandor	10.0
70.	UPL Ltd.	To Evaluate the Bio-efficacy and Phytotoxicity of fungicide GPF-215 against disease complex of Cumin	3.12.2022	ARS, Mandor	10.0

S.No.	Company	Product	Date	Centre	Testing Fee (In lakh)
71.	UPL Ltd.	To Evaluate the Bio-efficacy and Phytotoxicity of fungicide UPF 1317 against powdery mildew disease of Cumin	3.12.2022	ARS, Mandor	10.0
72.	PI Industries Pvt ltd.	Hynesol in cumin	9.12.2022	ARS Keshwana, Jalore	2.5
73.	Khandelwal Biofertilizer ltd.	ICAR Fusicont Bio-Raj for bio-efficacy evaluation for the product ICAR Fusicont Bio-Raj in cumin	4.1.2023	ARS, Mandor	2.5
74.	Verdesian Sci. ltd.	SDMACRO for evaluation efficacy on cumin yeild & attributing characers in cumin	23.1.2023	ARS, Mandor	2.5
	Total				**143.5**
		2023-24			
75.	Crystal Crop Protection Ltd.	CBS-01 l for Bio-efficacy & Phytotoxicity evaluation of overall crop growth, Vigor, yield and quality enhancement in Chilli	25.5.2023	ARS, Mandor	2.5
76.	Crystal Crop Protection Ltd.	CF-2050 WG for evaluation of Bio-efficacy and Phytotoxicity against early blight, late blight and Cercospora leaf spot diseases in Tomato	26.7.2023	CoA, Sumerpur	5.0
77.	Syngenta India Pvt. Ltd.	Ampligo 150 ZC, on green gram	1.7.2023	ARS, Mandor	5.00
78.	Syngenta India Pvt. Ltd.	Minecto Forte 480 SC for laps and thrips in pomegranate	1.7.2023	CoA, Jodhpur	10.00
79.	Syngenta India Pvt. Ltd.	TYMIRIUM 450SC for root knot nematode in pomegranate	1.7.2023	KVK, Sirohi	10.00
80.	Syngenta India Pvt. Ltd.	Miravis Duo for lead spots in pomegranate	1.7.2023	ARS, Mandor	10.00
81.	PI Industries Ltd.	PIX 10082 44% EW for evaluation against pest of Chickpea	26.7.2023	ARS, Keshwana, Jalore	5.0
82.	Bayer Crop science	Infinito & Solomon in Pomegranate for evaluation of Bio-efficacy and Phytotoxicity in Pomegranate	17.08.2023	ARS, Mandor	20.0
83.	Syngenta India Pvt. Ltd.	Evaluation of Fomesafen 7.5% + Fluzifop-p-Butyl 7.5% + Imazathaper 5% W/V (200 G/L) SL for weed control in green gram and black gram	17.07.2023	ARS, Mandor	10.0
84.	Narmada Bio-chem Ltd.	Bio NPK and Bio KMB	24.08.2023	ARS, Mandor	5.0
85.	UPL Sustainable Agri Solutions Ltd.	Bio-efficacy evaluation of Fipronil 15% + Flonicamid 15% WG in cumin	18.09.2023	ARS, Mandor	5.0

S.No.	Company	Product	Date	Centre	Testing Fee (In lakh)
86.	Insecticide India Ltd.	Bio-efficacy and phytotoxicity evaluation of IIL 301 in wheat	26.09.2023	ARS, Mandor	5.0
87.	Corteva Agri Science Seeds Pvt. Ltd.	Mustard hybrid Pioneer 18J408C and 4205A25	31.10.2023	ARS, Mandor	5.0
88.	EF Polymers Pvt. Ltd.	Hydogel in cumin	25.10.2023	ARS, Mandor	2.5
89.	Crystal Crop Protection Ltd.	Bio-efficacy and phytotoxicity evaluation of CH65175 WG in wheat	06.11.2023	ARS, Mandor	5.0
	Total				**106.25**
	Grand total				**474.25**

2.5 Additional Director Research (Seeds)

The office of the Additional Director Research (Seeds) is the side wing of DOR with mandate to produce and supply the quality and high yielding seeds i.e., Breeder/Foundation/Certified/TL category of various *Rabi* and *Kharif* crops to meet the requirements of seed growers, government agencies like Rajasthan State Seeds Corporation, National Seed Corporation, private seed producing agencies and farmers of Rajasthan as well as adjoining states.

2.5.1 Seed Production

To provide good quality seed of different varieties and different crops to the farmers and other stakeholders, the University takes production programme of breeders, foundation and TL seeds of improved varieties of various crops in *Kharif*, *Rabi* and *Zaid* seasons at various research stations, sub-stations, KVKs and Colleges. Besides, the University is also producing seed through participatory mode at farmers field. The university provides improved seeds (breeder/foundation seeds) to other seed producing institutions like Rajasthan State Seed Corporation, National Seed Corporation and private seed producing companies and also to the state through research institutes and KVKs. Year-wise seed production is given in Table 2.7 and fig. 2.2.

Table 2.7: Year-wise seed production at AU, Jodhpur

Year	Seed production (q)			
	TL	Certified/FS	BS	Total
2013	109.31	-	18.30	127.61
2014	584.26	-	368.04	952.3
2015	1077.02	-	1.77	1078.79
2016	1337.80	-	12.29	1350.09
2017	1762.42	-	11.35	1773.77
2018	1194.98	112.16	51.74	1358.88
2019	597.19	105.68	-	702.87
2020	1179.00	1370.39	4.69	2554.08
2021	681.18	973.70	24.28	1679.16
2022	732.54	605.76	12.27	1350.57
2023	781.31	934.15	100.81	1816.27
Total	**10037.01**	**4101.80**	**605.54**	**14744.39**

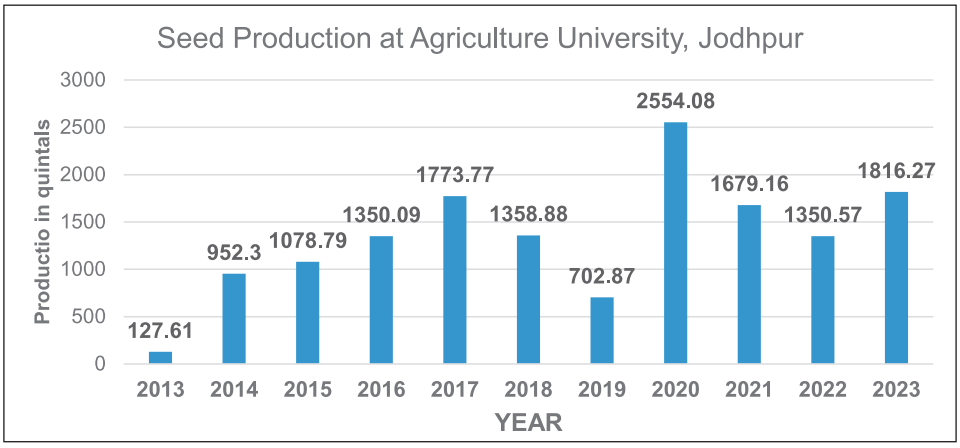
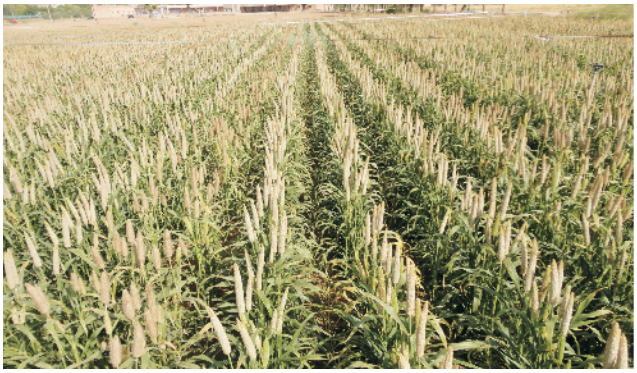


Fig.2.2 Seed production at AU, Jodhpur

Looking to the demand of pearl millet hybrid seed, the university also produces hybrid seed of the this crop particularly MPMH 17 and MPMH 21. Both the hybrids are very popular among the farmers of western Rajasthan.



Seed production of hybrid MPMH 17

Field view of MPMH 17

2.5.2 Seed-hub Projects

Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, GoI has alloted seven Seed-Hubs for crops/commodities, *viz*. pulses, oilseeds and millet crops to this University with the total sanction of Rs. 720.0 lakhs (Table 2.8).

Table 2.8: Seed hub projects budget sanctioned to AU, Jodhpur

S. No.	Unit	Crop(s)	Project cost (Rs. in Lakhs)
1.	ARS, Keshwana, Jalore	Pulses	150.00
2.	KVK, Nagaur	Pulses	150.00
3.	ARSS, Sumerpur	Pulses	150.00
4.	ARS, Mandor, Jodhpur	Pearl millet (A,B, R lines)	70.00
5.	ARSS, Sumerpur	Sesame	150.00
7.	ARS, Mandor, Jodhpur	Pearl millet (hybrid Seed)	50.00
		Total	**720.00**

2.5.3 Non-exclusive MoUs

To provide quality seeds to the farmers of the region, improve seed replacement rate and commercialization of newly released varieties the University has MoUs with 12 private seed producing companies. Till now, a total amount of Rs. 23.0 Lakh has been received as royalty (Table 2.9).

Table 2.9: The Non-exclusive MoUs between AU, Jodhpur and various private seed companies have been executed for seed production in Pearl millet and Sesame.

S. No.	Name of Company	Name of Hybrid/ Variety	Date of MOU	Amount (Rs. Lacs)
1.	Wellnext Seeds (India) Pvt. Ltd., Delhi	MPMH 17	15.07.2017	2.00
2.	Shri Sai Sadguru Seeds, Hyderabad	MPMH 17	11.01.2018	2.00
3.	Sri Laxmi Venkateswara Seeds, Kurnool, A. P.	MPMH 21	09.08.2018	2.00
4.	Sampoorna Seeds, Adoni, A.P.	MPMH 21	22.10.2018	2.00
5.	Dhartipura Beej Company, Jodhpur	MPMH 17	07.02.2019	2.00
6.	Manak Hybrid Seed Company, Jodhpur	MPMH 17	22.07.2019	2.00
7.	Classic Hybrids Seeds Pvt. Ltd, Ahmedabad	MPMH 17	26.02.2021	2.00
8.	Classic Hybrids Seeds Pvt. Ltd, Ahmedabad	RT 351	26.02.2021	1.00
9.	Sri Laxmi Venkateswara Seeds, Kurnool, A. P.	MPMH-17	05.08.2021	2.00
10.	Calix Agri-Genetics Pvt. Ltd., Jaipur	MPMH 17	28.07.2022	2.00
11.	Sampoorna Seeds, Kurnool Dist., Andhra Pradesh	MPMH-35	18.11.2022	2.00
12.	Momai Trading, Bhanvad 360510 Dist: Dev bhumi Dwarka, Gujrat	MPMH 21	4.8.2023	2.00
	Total			**23.0**

* Registration fee: Rs. 15,000 + Royalty advance 2.0 lakhs (@2% of sell) + seed cost)

2.5.4 Seed Processing Unit

A central seed processing facility with the capacity of 5 ton/hour has been established at University headquarter for processing of seeds of different crops produced at various units. This unit has been established under RKVY project with the cost of Rs. 500 Lakh. This unit is equipped with machines *viz*. Pre cleaner, gravity separator, destoner, seed treater, colour sortex, automatic packaging etc.

2.5.5 Seed Testing Laboratory

This laboratory is a model lab established to carry out experiments related to seed technology and to ensure the seed quality as per Indian Minimum Seed Standards. The laboratory is equipped with germination chamber, incubator, physical purity board, gravity separator, seed counter etc.

3. Education

3.1 Directorate of Education

Economic growth of the country depends on agricultural growth because agriculture is the prime occupation of the majority of population. In order to achieve this, there is an urgent need of improvement in the most basic endeavors, teaching in the field of agricultural sciences. Quality agricultural education is indispensable to prepare the trained human resource as per the need of future to overcome the challenges. To achieve the goal, the Director Education implements the following strategies through the colleges:

i. Organization and conduct of PG teaching in all the constituent Colleges of the University and for that purpose, shall pass such orders as may be necessary in consultation with the Dean of the Colleges, Director of Research, Director of Extension Education, where such consultancy is considered necessary.

ii. Responsible in collaboration with the Deans of the colleges, Director of Research for the coordination of research of Post Graduate students and its integration with the general research programmes of the University.

iii. Provide Educational Programmes based on modern system of Agricultural Education with the objective of producing competent and practical oriented graduates and post-graduates to handle production, management, research, extension education and teaching work in the field of Agriculture, Animal Husbandry and allied branches.

iv. Maintain records of the PG students in the University and also supervise their progress in coordination with Deans of the Colleges, Directors and Controller of Examinations and also responsible for the maintenance of proper standards of undergraduate and postgraduate instruction/ teaching.

v. In consultation with the Heads of Departments, Directorate of Education exercise control over the teaching load of the members of the Post Graduate Faculty and to provide, in consultation with the Heads of Department, guidance and leadership in curricula development/ refinement within each subject matter and integration of said curricula into appropriate instruction programme designed to prepare students for effective career in research, teaching and extension.

vi. Accreditation of the faculty members for PG teaching and acting as research guides and exercise measures to maintain academic standards.

vii. Develop and update the Post Graduate Studies Regulations and Information Bulletin and perform such other duties and functions as may be entrusted by the Vice-Chancellor from time to time for effective coordination of teaching in the University.

viii. Responsible for development of PG research in collaboration with other universities/ICAR Institutes/organizations within and outside the country.

The Directorate of Education of the University is headed by the Director Education (Table 3.1) and he is the monitoring authority for teaching activities of the University. The Director also works as a secretary for the Academic Council. He is responsible for coordination among the different units of Directorate.

Table 3.1: List of Directors of Education, AU Jodhpur

S.No.	Name	Period
1.	Dr. S.S. Solanki	18.10.2013 to 31.08.2016
2.	Dr. Ishwar Singh	01.09.2016 to 03.11.2016
3.	Dr. Balwant Singh Rajpurohit	04.11.2016 to 13.02.2019
4.	Dr. Sita Ram Kumhar	14.02.2019 to 05.05.2020
5.	Dr. B. S. Bhimawat	06.05.2020 to 31.08.2021
6.	Dr. Sita Ram Kumhar	01.09.2021 to Continue

3.2 Academic Council

The Academic Council (AC) is one of the highest academic body of AU, Jodhpur that has the responsibilities and functions of formulating the academic policy and of providing appropriate directions. The AC is chaired by the Vice-Chancellor and the Director Education serves as Secretary and have ex-officio and other members. Normally the Academic Council shall meet once in every four months on such dates as may be fixed by the Vice-Chancellor, however, special meetings of the Academic Council can be called by the Vice-Chancellor. The list of Academic Council meetings held is given in the Table 3.2.

Table 3.2: List of Academic Council meetings held

S.No.	No. of Meeting	Date of meeting	S.No.	No. of Meeting	Date of meeting
1.	I	06.08.2014	13.	XIII	25.06.2021
2.	II	28.09.2015	14.	XIV	28.07.2021
3.	III	05.07.2016	15.	XV	23.10.2021
4.	IV	15.06.2017	16.	XVI	07.02.2022
5.	V	16.12.2017	17.	XVII	13.05.2022
6.	VI	09.04.2018	18.	XVIII	04.01.2023
7.	VII	05.06.2018	19.	XIX	16.02.2023
8.	VIII	14.11.2018	20.	XX	05.04.2023
9.	IX	01.03.2019	21.	XXI	27.04.2023
10.	X	06.07.2019	22.	XXII	12.10.2023
11.	XI	06.06.2020	23.	XXIII	28.05.2024
12.	XII	24.11.2020			

3.3 Post Graduate and Ph.D. Programme

The University is offering various degree programmes in Post Graduate and Ph.D. programmes. Since inception, the Directorate of Education has awarded six Ph.D. degrees (Table 3.3) and 102 Masters Degrees in Agriculture faculty in the disciplines of Agronomy (23), Genetics and Plant Breeding (24), Horticulture (22), Plant Pathology (12), Entomology (11), Extension Education (10). Details are given in Table 3.4 and 3.5

3.4 Colleges

The University is having multi-faculty teaching setup to envisage agricultural development in the western parts of Rajasthan. There are four faculties, i.e. Faculty of Agriculture, Faculty of Dairy Technology, Faculty of Agriculture Engineering and Faculty of Management.

Table: 3.3. Details of Award of Ph.D. degree(s) by the Agriculture University, Jodhpur

S.No.	Name of Student	Department	Year of Degree award	Title of Thesis
1	Sarita	Agronomy	2021	Effect of Fertility Levels and Different Herbicides on the Productivity of Wheat (*Triticum aestivum* L.)
2	Manoj Kumar	Agronomy	2021	Agronomic Evaluation of Straight and Customized Fertilizer Formulation in Different Pearl Millet [*Pennisetum glaucum* (L.) R. Br. emend Stuntz] Hybrids
3	Radhe Shyam Kherwa	Horticulture	2022	Heterosis and Combining Ability Studies for Yield and Component Characters in Brinjal (*Solanum melongena* L.) over Different Seasons
4	Asha Jat	Horticulture	2023*	Effect of Water Ragimes, Land Configurations and Mulching on Growth and Quality of Onion [*Allum cepa* (L.).]
5	Versha Sharma	Genetics and Plant Breeding	2023*	Heterosis, Combining Ability and Stability Study in Castor [*Ricinuss communis* (L.)]
6	Bhag Chand Dhayal	Agronomy	2023*	Effect of Agronomic Biofortification of Zinc and Iron on Growth and Quality of Mungbean [*Vigna radiata* (L.) Wilczek.]

*To be awarded in 5th Convocation

Table 3.4 Year and subject wise M.Sc. Ag. degree awarded by the Agriculture University, Jodhpur

S.No.	Year	Departments*	Total No. of degrees
1.	2017-18	Agronomy (4), GPB (3), Horticulture (4)	11
2.	2018-19	Agronomy (3), GPB (4), Horticulture (4)	11
3.	2019-20	Agronomy (5), GPB (4), Horticulture (4) Plant Pathology (2)	15
4.	2020-21	Agronomy (3), GPB (5), Horticulture (3) Plant Pathology (5), Entomology (4), Extension Education (3)	23
5.	2021-22	Agronomy (5), GPB (4), Horticulture (4) Plant Pathology (3), Entomology (4), Extension Education (4)	24
6.	2022-23	Agronomy (3), GPB (4), Horticulture (3) Plant Pathology (2), Entomology (3), Extension Education (3)	18
		Total	**102**

*in parentheses the number are degrees awarded.

Table 3.5 Year and discipline wise details of students awarded M.Sc. (Ag.) degrees

S.No.	Name of Student	Department	Title of Thesis
		2017-18	
1	Ajay Kumar	Agronomy	Effect of Levels of Sulphur and Antioxidants on Sustainable Cumin (*Cuminum cyminum* L.) Production
2	Anjali Jingar	Agronomy	Effect of Date of Sowing and Plant Geometry on Growth and Yield of Chia (*Salvia hispanica* L.)
3	Vijay Laxmi Yadav	Agronomy	Efficacy of Pre and Post-emergence Herbicides on Growth and Yield of Chickpea (*Cicer arietinum* L.)
4	Kailash Chand Dalal	Agronomy	Micro-irrigation and Fertigation Management in Cumin (*Cuminum cyminum* L.)

S.No.	Name of Student	Department	Title of Thesis
5	Govind Goyal	Genetics & Plant Breeding	Genetic Variability, Correlation and Path Analysis in Quinoa (*Chenopodium quinoa* Willd.)
6	Madhu Yadav	Genetics & Plant Breeding	Genetic Variability, Correlation and Path Analysis in Wheat (*Triticum* sp.)
7	Shiv Raj	Genetics & Plant Breeding	Genetic Variability, Correlation and Path Analysis in Fenugreek (*Trigonella foenum-graecum* L.)
8	Rajesh Meena	Horticulture	Effect of Humic and Boric Acid on Growth, Yield and Quality of Chilli (*Capsicum annum* L.)
9	Nirmala	Horticulture	Evaluation of Parthenocarpic Cucumber (*Cucumis sativus* L.) Varieties under Insect Proof Net House Conditions
10	Manish Kumar	Horticulture	Effect of Different Methods of Defoliation in Lasura (*Cordia myxa* L.) on Yield and Quality of Fruits
11	Mahipal Jat	Horticulture	Genetic Variability, Correlation and Path Analysis in Fennel (*Foeniculum vulgare* Mill.) Genotypes
		2018-19	
1	Mukesh Mandiwal	Agronomy	Effect of Phosphorus and Biofertilizers on Growth and Yield of Mungbean [*Vigna radiata* (L.) Wilczek]
2	Hitesh Borana	Agronomy	Effect of Weed Management Practices on Growth and Yield of Clusterbean [*Cyamopsis tetragonoloba* (L.) Taub]
3	Navratan Gahlot	Agronomy	Effect of Zinc and Iron Application on Growth and Yield of Mungbean [*Vigna radiata* (L.) Wilczek]
4	Shankar Lal Yadav	Genetics & Plant Breeding	Genetic Variability and Divergence Study for Seed Yield and it's Components in Pearl Millet [*Pennisetum glaucum* (L.) R. Br.]
5	Sushila Sirohi	Genetics & Plant Breeding	Heterosis and Combining Ability Studies in Sesame (*Sesamum indicum* L.)
6	Babita Kumari	Genetics & Plant Breeding	Genetic Variability, Correlation and Path Analysis in Sesame (*Sesamum indicum* L.)
7	Manisha Kumari	Genetics & Plant Breeding	Morphological Characterization and Diversity Studies in Sesame
8	Manisha Verma	Horticulture	Effect of Spacing and Training Method on Growth and Yield of Off-season Ridge Gourd (*Luffa acutangula* L.) Cultivation Under Insect Proof Net-house Conditions
9	Somveer	Horticulture	Effect of Staggered Sowing and Spacing on Growth, Yield and Quality of Carrot (*Daucus carota* L.) Varieties in Arid Region of Rajasthan
10	Kunj Bihari Mehar	Horticulture	To Study Performance of Brinjal (*Solanum melongena* L.) Cultivars and Hybrids under Shade-net House Conditions of Western Rajasthan
11	Miss. Priyanka	Horticulture	Genetic Variability and Diversity Analysis in Muskmelon (*Cucumis melo* L.)
		2019-20	
1	Surendra Kumar	Agronomy	Efficacy of Herbicides on Growth and Yield of Pearl millet [*Pennisetum glaucum* (L.) R. Br.]
2	Pushkar Dev	Agronomy	Optimization of Zinc in Mungbean [*Vigna radiata* (L.) Wilczek] Varieties

S.No.	Name of Student	Department	Title of Thesis
3	Priyanka	Agronomy	Efficacy of Herbicides in Kharif Groundnut (*Arachis hypogaea* L.)
4	Mukesh Danga	Agronomy	Efficacy of Herbicides on Growth and Yield of Mungbean [*Vigna radiata* (L.) Wilczek]
5	Koushal Kishor Bijarnia	Agronomy	Effect of Stress Mitigating Chemicals and Sulphur on Growth and Yield of Mungbean [*Vigna radiata* (L.) Wilczek]
6	Anita	Genetics & Plant Breeding	Genetic Divergence and Character Association Studies on Seed Yield and Component Traits in Mungbean [*Vigna radiata* (L.) Wilczek]
7	Antra Thada	Genetics & Plant Breeding	Variability, Correlation and Path Analysis in Chia (*Salvia hispanica* L.)
8	Seema Jaif	Genetics & Plant Breeding	Heterosis and Combining Ability and Gene Action Studies in Sesame (*Sesamum indicum* L.)
9	Sunita Choudhary	Genetics & Plant Breeding	Studies on Heterosis and Combining Ability in Pearl Millet [*Pennisetum glaucum* (L.) R. Br.]
10	Sunil Kumar	Horticulture	Diversity Studies in Round Gourd [*Praecitrullus fistulosus* (Stocks) Pangalo]
11	Manish Kumar Meena	Horticulture	Performance and Genetic Variability Studies in Okra [*Abelmoschus esculentus* (L.) Moench]
12	Mamraj Meena	Horticulture	Evaluation of Sweet Pepper (*Capsicum annum* L. Grossum Sendt.) Genotypes Under Modified Net House
13	Devkaran	Horticulture	Genetic Variability, Character Association and Path Analysis Study in Sweet Potato [*Ipomoea batatas* (L.) Lam.]
14	Vijay Pal	Plant Pathology	Studies on Anthracnose [*Colletotrichum capsici* (Sydow) Butler and Bisby] of Chilli (*Capsicum annuum* L.) and its Management
15	Mahendra Kumar Saran	Plant Pathology	Investigation on Collar Rot (*Aspergillus niger* Var. *Tieghem*) of Groundnut (*Arachis hypogaea* L.) and its Management
		2020-21	
1	Rekha Kharra	Agronomy	Effect of Agronomic Biofortification of Zinc and Ironon Growth and Yield of Chickpea (*Cicer arietinum* L.) Varieties
2	Anil Swami	Agronomy	Effect of Jiwamrita on Growth and Yield of Organic Mungbean [*Vigna radiata* (L.) Wilczek]
3	Virender	Agronomy	Efficacy of Herbicides on Growth and Yield of Isabgol (*Plantago ovata* Forsk.)
4	Amninder Singh	Genetics & Plant Breeding	Genetic Variability, Correlation and Path Analysis in Cumin (*Cuminum cyminum* L.)
5	Rajesh Geela	Genetics & Plant Breeding	Morphological, Physiological and Molecular Characterization of Pearl millet [*Pennisetum glaucum* (L.) R. Br.] Hybrids and Varieties
6	Renu Rani	Genetics & Plant Breeding	Genetic Variability, Character Association in Pearl Millet [*Pennisetum glaucum* (L.) R. Br.]
7	Sunita Junjhadia	Genetics & Plant Breeding	Variability Analysis for Morphological Traits in Pearl Millet [*Pennisetum glaucum* (L.) R. Br.] Under Normal and Limited Moisture Conditions
8	Ujala Bairwa	Genetics & Plant Breeding	Genetic Variability, Correlation and Path Analysis in Finger Millet [*Eleusine coracana* (L.) Gaertn]

S.No.	Name of Student	Department	Title of Thesis
9	Sonu Kumari	Horticulture	Effect of Plant Growth Regulators on Growth, Flowering and Yield of Okra [*Abelmoschus esculentus* (L.) Moench.]
10	Laxman Singh	Horticulture	Effect of IBA and Various Media on Hardwood Cuttings of Pomegranate (*Punica granatum* L.) cv. Bhagwa
11	Rakesh Chouhan	Horticulture	Effect of Foliar Fertilization of NPK on Growth and Yield of Carrot (*Daucus carota* L.) in Loamy Sand Soil of Rajasthan
12	Anand Choudhary	Plant Pathology	Investigations and Management of Early blight [*Alternaria solani* (Ellis and Martin) Jones & Grout] of Tomato (*Solanum lycopersicum* L.)
13	Mukesh Kumar	Plant Pathology	Studies on Blast [*Pyricularia grisea* (Cooke) Sacc.] of Pearl millet [*Pennisetum glaucum* (L) R. Br] and it's Management
14	Pradip Kumar Bairwa	Plant Pathology	Studies on Stem and Root Rot [Macrophomina phaseolina (Tassi) Goid.] of Sesame (*Sesamum indicum* L.) and it's Management
15	Pooja Yadav	Plant Pathology	Studies on Alternaria Leaf Blight [*Alternaria alternata* (Fr.) Keissler] of Carrot (*Daucus carota* L.) and its Management
16	Hitendra Jangir	Plant Pathology	Exploration of Cumin (*Cuminum cyminum* L.) wilt (*Fusarium oxysporum f.sp. cumini*) and its Management
17	Santosh Kumar	Entomology	Biology and Management of Leaf Webber and Capsule Borer, *Antigastra catalaunalis* (Duponchel) in Sesame
18	Nisha Choudhary	Entomology	Seasonal Incidence and Management of Aphids in Cumin, *Cuminum cyminum* L.
19	Dindayal Tanwar	Entomology	Seasonal Incidence and Management of Insect Pest of Mungbean [*Vigna radiata* (L.) Wilczek]
20	Balveer	Entomology	Seasonal Incidence, Varietal Screening and Management of Major Insect Pests of Okra [*Abelmoschus esculentus* (L.) Moench]
21	Lokendra Singh Kishnawat	Extension Education	Knowledge and Adoption of Landraces by the Beneficiaries of Global Environment Facilities (GEF) Project in Western Rajasthan
22	Divya Choudhary	Extension Education	Knowledge and Adoption of Solar Pumps by the Farmers in Jodhpur District of Rajasthan
23	Rajesh Kumar Serawat	Extension Education	Knowledge and Attitude of Farmers towards Crop Based Module under Farmer FIRST Programme in Jodhpur District of Rajasthan
			2021-22
1	Dal Chand Gadri	Agronomy	Agronomic Evaluation of Chickpea (*Cicer arietinum* L.) Genotypes Suitable for Mechanical Harvesting
2	Devi Lal Kikraliya	Agronomy	Bio-efficacy of sorghum extract and herbicide on growth, yield and quality of wheat (*Triticum aestivum* L.)
3	Anuj Kumar	Agronomy	Efficacy of Herbicides on Growth and Yield of Chia (*Salvia hispanica* L.)
4	Manisha Yadav	Agronomy	Herbicidal Weed Management in Chickpea (*Cicer arietium* L.)
5	Vikash Meena	Agronomy	Efficacy of Herbicides in Fenugreek (*Trigonella foenum-graecum* L.)
6	Somendra Meena	Horticulture	Effect of Integrated Nutrient Management on Growth, Yield and Quality of Ber (*Ziziphus mauritiana* Lam.)
7	Suman Punia	Horticulture	Effect of Gibberellic Acid, 4-CPA and NAA on Growth, Yield and Quality of Tomato (*Solanum lycopersicum* L.) *cv.* Ansal
8	Ronak Kuri	Horticulture	Effect of Zinc and Iron application on Growth and Yield of Garlic (*Allium sativum* L.)

S.No.	Name of Student	Department	Title of Thesis
9	Sanju Lamba	Horticulture	Effect of Pre-sowing Seed Treatments on Germination and Seedling Vigour of Ber (*Ziziphus rotundifolia* Lamk.)
10	Ajay Singh	Genetics & Plant Breeding	Genetic Variability and Character Association Studies in Chickpea (*Cicer arietium* L.)
11	Pinky Badgotya	Genetics & Plant Breeding	Genetic Analysis for Heat Tolerance in Wheat (*Triticum aestivum* L.)
12	Surendra Kumar	Genetics & Plant Breeding	Genetic Variability and Stability Analysis in Mustard (*Brassica juncea* L.)
13	Hitesh Choudhary	Genetics & Plant Breeding	Genetic Variability, Correlation and Divergence Studies in *Brassica* spp.
14	Ajjad Khan	Plant Pathology	Evaluation of Different Species and Substrates for Cultivation of Oyster (*Pleurotus* spp.)
15	Sunita Sharma	Plant Pathology	Incidence of Root Rot (*Rhizoctonia solani* Kuhn) of Fenugreek (*Trigonella foenum-graecum* L.) and Its Management
16	Gopal Lal Yadav	Plant Pathology	Studies on Prevalence, Identification and Management of *Alternaria* blight (*Alternaria* spp.) of Cumin (*Cuminum cyminum* L.)
17	Akshay Kumar Singh Pratihar	Entomology	Population Dynamics of Insect Pests and Management of Aphid, *Lipaphis erysimi* (Kalt.) in Mustard
18	Shreya Mishra	Entomology	Population Dynamics of Insect Pests and Management of Aphid in Fenugreek (*Trigonella foenum-graecum* L.)
19	Sarita Dadhich	Entomology	Bionomics and Management of Predominant Species of Aphid in Cumin (*Cuminum cyminum* L.)
20	Rajveer Singh Ola	Entomology	Population Dynamics of Major Insect Pests and Their Management in Isabgol (*Plantago ovata* Forsk.)
21	Ankita Bishanoi	Extension Education	Technological Gap in Adoption of Kinnow Production Technology among the Farmers of Sri Ganganagar District of Rajasthan
22	Antima Bera	Extension Education	Knowledge and Attitude of Farmers towards Soil Health Cards in Nagaur District of Rajasthan
23	Kamlesh Gurjar	Extension Education	Behaviour of Onion Growers Towards Integrated Pest Management Practices (IPM) in Jodhpur District of Rajasthan
24	Ravindra Singh Choudhary	Extension Education	Level of soft skills among Under Graduate Students of Agriculture University, Jodhpur
			2022-23*
1.	Lal Chand Meena	Agronomy	Efficacy of Nano Fertilizers on Growth Yield and Quality of Sesame (*Sesamum indicum* L.)
2.	Mamta Kumari Tanwar	Agronomy	Effect of Seed Priming and Foliar Sparry of Stress Mitigating Chemicals on Growth and Yield of Mungbean (*Vigna radiata* (L.) Wilczek.) Varieties
3.	Mehraj Ud Din Sofi	Agronomy	Efficacy of Post-emergance Herbicides on Growth and Yield of Mungbean (*Vigna radiata* (L.) Wilczek.)
4.	Pradeep Bijarniya	GPB	Assessment of Genetic Parameters in Mutant Lines of Indian Mustard (*Brassica juncea* L.)
5.	Ruchika	GPB	Heterosis and combining ability studies in Pearl millet [*Pennisetum glaucum* (L.) R.Br.]
6.	Shalini Raghuwanshi	GPB	Studies on Heterosis, Combining Ability and Gene Effects in Castor (*Ricinus communis* L.)

S.No.	Name of Student	Department	Title of Thesis
7.	Yogendar Yadav	GPB	Genetics divergence studies in Foxtail millet (*Setaria italica* L. P. Beauv)
8.	Kalpna	Horticulture	Effect of Nano Urea Fertilization on Growth, Yield and Quality of Nagauri methi (*Trigonella corniculata* L.)
9.	Nitu Nehra	Horticulture	Genetic Variability and Path Coefficient analysis Study in Cauliflower (*Brassica oleracea* L. Var. botrytis) Under Arid Climatic Conditions
10.	Rajneesh Choudhary	Horticulture	Performance of Gladiolus (*Gladiolus hybridus* Hort.) Genotypes under Arid Conditions of Rajasthan
11.	Megha Jaimini	Plant Pathology	Studies on Dry root rot [(*Macrophomina phaseolina* (Tassi) Goid.] *of* Mothbean *[Vigna aconitifolia* (Jacq. Marechal] and its Management
12.	Surjeet	Plant Pathology	Studies on Downy Mildew Incidence in Pearl millet Incited by [(*Sclerospora graminicola* (Sacc.) Schoret] & its Management
13.	Amar Singh	Entomology	Diversity of Insect Pollinators on Kharif Crops of Western Rajasthan
14.	Pooja Kumari	Entomology	Population Dynamics and Management of Major Insect Pest of Pearl millet (*Pennisetum glaucum* (L.)R.Br.)
15.	Pushpa Choudhary	Entomology	Diversity of Pentatomid Bug Fauna in Western Rajasthan
16.	Payal Choudhary	Extension Education	Utility Perception of Students towards Rural Awareness Work Experience Programme in Agriculture University, Jodhpur (Rajasthan)
17.	Rimpal	Extension Education	Knowledge and Adoption of Recommended Goat Farming Practices under ARYA Project in Barmer District of Rajasthan
18.	Vikash Dhayal	Extension Education	Appraisal of Farmers Producer Organizations in Nagaur District of Rajasthan

*To be awarded in 5th Convocation

3.4.1. Faculty of Agriculture

In the faculty of Agriculture, there are four colleges viz., College of Agriculture, Jodhpur, Sumerpur (Pali), Nagaur and Baytu/Batadu (Barmer). In this faculty the University admits the students through JET/Pre-PG/Ph.D. Entrance Exam./ ICAR test in B.Sc. (Hons.) Agriculture, M.Sc. and Ph.D. degree programme and the intake (no. of seats) of students in 2023-24 for each college is in the Table 3.6.

able 3.6: Total intake of seats in B.Sc. (Hons.) Agriculture in different constituent colleges

S.No.	Name of College	Intake Seat type			
		JET Exam.		ICAR Quota	Total No. of Seats
		Normal	Payment		
1.	College of Agriculture, Jodhpur	74	32	14	120
2.	College of Agriculture, Sumerpur (Pali)	74	32	14	120
3.	College of Agriculture, Nagaur	74	32	14	120
4.	College of Agriculture, Baytu	44	16	-	60
	Total	**266**	**112**	**42**	**420**

In the faculty of Agriculture under UG Programme with the intake, enrolled and passed out students of CoA, Jodhpur are 704/645/377, at CoA, Sumerpur are 754/692/341, at CoA, Nagaur are 634/511/219 and CoA, Baytu are 180/172, respectively (Table 3.7). In University at CoA, Jodhpur out of 198 seats, 176 enrolled in PG programme and 102 students awarded the M.Sc. (Ag.) degree till 2022-23 in the discipline of Agronomy, Genetics & Plant Breeding, Horticulture, Plant Pathology, Entomology and Extension Education (Table 3.8). Through Ph.D. programme, 41 students get admission out of 52 seats and only six completed the Ph.D. degree (Table 3.9).

A total of 1671 students received different types of scholarships since 2016.

Table 3.7: No. of B.Sc. (Hons.) Ag. students admitted, enrolled and passed out in the University

Particulars	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018 -19	2019-20	2020 -21	2021-22	2022-23	2023-24	Total No. of Seats
College of Agriculture, Jodhpur													
Intake capacity	44	50	50	50	50	50	50	60	60	60	60	120	704*/ 560
Enrolled	44	36	42	51	49	49	50	60	59	42	53	110	645*/ 523
Passed out	-	-	-	40	35	45	50	54	50	47	56	-	377
College of Agriculture, Sumerpur													
Intake capacity	44	50	50	50	50	50	50	50	60	60	120	120	754*/ 610
Enrolled	38	34	40	43	47	50	50	61	60	53	115	101	692*/ 580
Passed out	-	-	-	38	34	40	43	47	43	45	51	-	341
College of Agriculture, Nagaur													
Intake capacity	-	-	-	50	50	50	50	50	60	60	120	120	634
Enrolled	-	-	-	36	47	48	46	60	58	112	105	102	511
Passed out	-	-	-	-	-	-	33	48	43	37	58	-	219
College of Agriculture, Baytu													
Intake capacity	-	-	-	-	-	-	-	-	-	60	60	60	180
Enrolled	-	-	-	-	-	-	-	-	-	59	54	59	172
Passed out	-	-	-	-	-	-	-	-	-	-	-	-	-

*Data include student count since inception of college in SKRU, Bikaner.

Table 3.8: No. of Post graduate students admitted, enrolled and passed in College of Agriculture, Jodhpur

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total No. of Seats
M. Sc. (Ag.)									
Intake capacity	12	12	16	24	24	24	36	50	198
Enrolled	11	11	15	24	24	19	28	44	176
Passed out	-	11	11	15	23	24	18	-	102

Table 3.9: No. of Ph.D. students admitted, enrolled and passed student in College of Agriculture, Jodhpur

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total No. of Seats
Intake capacity	4	6	6	6	10	20	52
Enrolled	4	5	4	6	9	13	41
Passed out		-	2	1	3	-	6

Table 3.10: Student data for various scholarship schemes in the University

Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
College of Agriculture, Jodhpur								
No. of Students	84	126	126	108	157	176	157	934
College of Agriculture, Sumerpur								
No. of Students	98	103	81	90	100	-	109	581
College of Agriculture, Nagaur								
No. of Students	-	-	54	91	81	141	178	545
College of Agriculture, Baytu								
No. of Students	-	-	-	-	22	33	16	71
Total	**182**	**229**	**261**	**289**	**360**	**350**	**460**	**2131**

3.4.1.1 College of Agriculture, Jodhpur

College of Agriculture, Jodhpur was established in the year 2012 as a constituent college of SKRAU, Bikaner. The establishment of this College was an important milestone in the history of arid region of the Rajasthan State. The college imparts teaching in basic as well as scientific skills with a view to produce competent and practical oriented graduate, postgraduate students and research scholars to handle production, manage research extension service, and generate employment in the field of Agriculture.

Initially, the College of Agriculture, Jodhpur was established at ARS campus and in 2022 it has been shifted at GTC campus, Mandor on NH 62 with 12 ha land comprising administrative and academic buildings, library, common hall, examination hall, various departments, play ground, hostels and instructional farms. The Administration of the college is look after by its Dean (Table 3.11).

Table 3.11: List of Deans headed the college

S.No.	Name	Duration	
		From	to
1.	Dr. G. N. Parihar	8.08.2012	19.10.2013
2.	Dr. K. K. Bora	19.10.2013	30.09.2014
3.	Dr. M. C. Bohra	01.10.2014	30.09.2015
4.	Dr. V. S. Jaitawat	01.10.2015	20.11.2017
5.	Dr. B. S. Rajpurohit	21.11.2017	03.08.2018
6.	Dr. Ummed Singh	04.08.2018	30.08.2019
7.	Dr. B. S. Bhimawat	30.08.2019	31.08.2021
8.	Dr. Sita Ram Kumhar	01.09.2021	27.09.2023
9.	Dr. M. M. Sundria	27.09.2023	Continue

COA Jodhpur offering following degree programmes including UG, PG and Ph.D. as per the details given in Table 3.12.

Table 3.12: Details of degree programme in COA, Jodhpur

Degree	Subject/ Department	Year of Start	Intake Capacity in 2023-24
B.Sc. (Hons.)	All compulsory as per Vth Dean's recommendations	2012	120
M.Sc. (Ag.)	Agronomy	2016	8
	Horticulture now M.Sc. (Hort.) Vegetable Science from 2022	2016	8
	Genetics and Plant Breeding	2016	8
	Plant Pathology	2018	8
	Entomology	2019	8
	Extension Education	2019	6
	Soil Science	2023	6
	Organic Farming	2023	4
Ph.D.*	Agronomy	2018	4
	Horticulture$^{\#}$ now Vegetagle Science (Since 2022)	2018	4
	Genetics and Plant Breeding	2018	4
	Plant Pathology	2022	4
	Entomology	2022	4

*In addition to above one supernumerary seat for Ph.D. in each Department is for in-service candidate, if candidate is available.
$^{\#}$ PG Degree programme of Horticulture department is converted into Vegetable Science.

Administrative Block, COA Jodhpur

Academic Block-1 COA Jodhpur

3.4.1.1.1 Laboratories

All the Departments are having well equipped UG and PG Laboratories for practical classes. Besides these, specific laboratories for Mushroom, Soil and Water Analysis, Seed Technology and Phyto-Sanitary are in function at ARS Mandor and are being utilized for PG and Ph.D. Studies. Agro-Meteorological Observatory, established at ARS Mandor, has also been utilized by the college students. These laboratories are well equipped with sophisticated instruments. For practical education, the college has well-developed Instructional Farms for research and seed production.


Students working in Laboratory

Agronomy Laboratory: This Lab. is having instrument facilities like Double Stage water distillation Unit, UV-Visible Spectrophotometer, Moisture box, Flame Photometer, Seed Germinator (Single Chamber), Soxhlets oil extraction unit, Seed Dresser, Hand Digital Refractometer, Yoder apparatus (Sieve Shaker Wet Yoder Types), Double Ring Infiltrometer, Ball Grinder and Microwave Digestion System etc. for research/ practical purposes.

Agronomy Lab.

Students working in Agronomy Lab.

Genetics and Plant Breeding Laboratory: The Lab. of Department of Genetics and Plant Breeding has equipments as Microscope (monocular & binocular), pH Meter, Swing Out Bucket Centrifuge, Electronic Balance, Hot Air Oven, Seed Germinator, Soxhlet Unit etc. for research/ practical purposes.

Horticulture Laboratory: This Lab. is well-equipped with Microwave oven, Hot air oven, Compound microscope, Refrigerator, Spraying equipments, Deep freeze (-20°C), Digital weighing Pan balance, High Precision Digital weighing balance, Mixer Grinder, Fruit Pulper, Water Distillation Unit, Hand refractometer,

GPB Lab.

Students working in GPB Lab.

Abbey's refractometer, Digital Refractometer, Digital Vernier caliper, Electric Lawn Mower, Electric Hedge Cutter, Electric Saw, Digital Spectrophotometer, Digital Flame Photometer, Digital SLR Camera, Digital Lux meter, Soil Thermometer, Digital hand held pH meter, BOD Incubator and Laboratory Freeze dryer etc.

Horticulture Lab.

Students working in Lab.

Plant Pathology Laboratory: A well-equipped Plant Pathology Lab. plays a crucial role in the field of agriculture and plant science in the college. It empowers scientists and researchers to make significant contributions to agriculture by understanding, controlling, and preventing plant diseases. The college laboratory is having Morden equipment like UV-Visible Spectrophotometer (Dual beam), Water Purification System, Ball Grinder, Water bath, Thermocycler/PCR, B.O.D Shaker Incubator, Fluorescence Microscope with accessories, B.O.D Incubator, Multipurpose Table top refrigerated centrifuge, ICE Flaker, ELISA reader with accessories, Hot plate, Horizontal gel electrophoresis assembly, Deep freeze (-80°C),Vertical gel electrophoresis assembly, Automatic Autoclave, Gel

Plant Pathology Lab.

Students working in Pathology Lab.

Documentation system, Nanodrop, Digital Magnetic Stirrer with accessories, Bio-safety Cabinet, Vortex machine, Digital SLR Camera with Lens Kit with accessories, Spinner, Laminar air flow chamber, Refrigerated centrifuge etc.

Entomology Laboratory: The Laboratory is having facilities like BOD incubator, Insect Light Trap, Advanced Stereo Zoom microscope, Breeding nest for Chrysopa, Centrifuge machine, Insect Cage, Oven Soxhlet extraction apparatus, Insect Collection Box, Graph microscope for insect drawing, Breeding nest, Hot plate, Insect Showcase cabinet, Stereo Zoom Microscope (Trinocular) Insect Showcase cabinet, Stereo zoom Microscope, Binocular, Insect Growth Chamber, Magnascope (Bench magnifier), Insect activity recorder, Corcyra Egg laying cage, Trap for fruit flies, Corcyra rearing system, Insect Light Trap. Recently the Department has developed insect museum.

Entomology Lab.

Students working in Entomology Lab.

Insect Museum

Extension Education Laboratory: Extension Education Lab is equipped with ICT technologies and other related instruments for research/ practical purpose.

Extension Education Lab.

Students using audio visual aids

Soil Science Laboratory: It is a well equipped lab with instruments like Spectro-photometer, pH Meter, EC meter, Distillation unit, Flame Photometer, N-semi analyzer, N-Fully automatic analyzer, Extraction assembly, Hydrometer, Centrifuge machine, Magnetic stirrer, Soil sampling auger, Atomic absorption spectrophotometer (AAS), Muffle Furnaces, Water Bath, Plant sample digestion assembly, Hot -air-Oven etc. for research/ practical purpose.

Soil Science Lab.

Students in Soil Science Lab.

Basic Science Laboratory: Basic science Lab. is well equipped with instruments like Biosafety cabinet, Plant-microbe growth chamber, Laminar air flow chamber, Orbital Shaking incubator, BOD incubator with Digital control system, Autoclave, Refrigerator/ cooling cabinet, Hot air oven, Electronic weighing balance, Weighing balance, Grinder cum mixer, Ultrapure water purification system, Deep freeze (-40°C), Colony counter, Light (Compound) Microscope with camera and computer system for imaging software, Haemocytometer, PCR, Gel documentation system with accessories, Colorimeter, Centrifuge (multipurpose), Water bath, Steam sterilizer, Dry water bath, Spinner, Microwave oven, Spectrophotometer, Vortex mixer, Hot plate with magnetic stirrer, Micro centrifuge, pH meter etc. specially for Microbiology subject.

Basic Science Lab.

Students in Basic Science Lab.

Computer Laboratory: Computer facilities exist at the campus for the benefit of students and staff. In addition, there is a well-equipped lab. with 30 computer having internet facility for imparting training to students.

Students doing Practical in Computer Lab.

3.4.1.1.2 Library

The College library has over 6200 books and many national and International Journals including magazines and bulletins. Library is having common reading hall, reading room for newspapers and magazines. University has established the access of Consortium for *e*-Resources in Agriculture (*CeRA*) facility at College of Agriculture, Jodhpur on 20.10.2021 and became the member of *CeRA* and receives *e*-Journals, *e*-Books etc in agricultural and allied sciences. Students and faculty are provided with internet facilities and also online/digital access of books.

Library

Students in Library

3.4.1.1.3 Classrooms

Through National Agricultural Higher Education Project (NAHEP), the college has been equipped with four smart classrooms with *hi-tech* teaching aids, having facilities of recording lecture in audio-visual mode.

3.4.1.1.4 Games and sports facilities

The college has its own games and sports facilities for sports such as volleyball, football, badminton, tennis *etc*. The college has a track for athletics and an indoor stadium for badminton and Table Tennis having multi-gym facility. Cement paved and night lit basketball and volleyball are special attractions of the college. Many students have shown their excellence at the state and national level tournaments. All the students enrolled in the college become members of Young Farmers' Association, which encourages students to instil youth leadership, awareness and consciousness towards social issues having relevance to the farming community.

Smart Classroom

Virtual Classroom

3.4.1.1.5 NSS/Physical Education

Every student takes part in NSS for two academic sessions and attends a compulsory one-week NSS camp to meet the requirement for undergraduate degree programmes.

NSS Certificate distribution

NSS Function

3.4.1.1.6 Hostels

New hostels one each for girls' and boys' have been constructed each with the capacity of 58 students within premises of college and these are to be allotted in the session 2023-24. Each hostel has 29 double seated rooms.

Boys Hostel

Girls Hostel

3.4.1.1.7 Other Facilities

Among the other facilities college has a placement cell working in collaboration with the Students Welfare Office of the University. The College is having other necessary cells *viz*., IQAC, Women Sexual Harassment Cell, Technical Cell, IPR Cell, Livestock and Poultry Unit *etc*. for benefit College students. The bus transport facility is also available for students for visit of experimental sites, farm & KVKs and other institutes of eminence as and when required. The college also having its Alumni Association. Canteen and Workshop are also located in the campus.

Poultry Unit CoA Jodhpur

Live-Stock Unit, CoA Jodhpur

3.4.1.2 College of Agriculture, Sumerpur (Pali)

The college is located at Sumerpur, about 3 km away from Sumerpur city on Jawai bandh road. The College of Agriculture, Sumerpur (Pali) came into existence in the year of 2012 and it is constituent college of AU Jodhpur for B.Sc. (Ag.) Hons. degree as per 5th Dean's recommendation with intake capacity of 120 students. The list of Deans of the college is given in Table 3.13.

Table 3.13: The list of Deans of the college

S.No.	Name	Duration	
		From	to
1.	Dr. V. S. Jaitawat	18.09.2013	29.08.2014
2.	Dr .B. S. Bhimawat	30.08.2014	02.03.2017
3.	Dr. H. P. Parewa (O.S.D.)	03.03.2017	05.06.2017
4.	Dr. S. D. Ratnoo	06.06.2017	25.09.2021
5.	Dr. R. L. Bhardwaj (O.S.D)	26.09.2021	04.03.2022
6.	Dr. R. L. Bhardwaj	05.03.2022	Continue

The College has instructional farm and research laboratories, class rooms and a library. The college is having well equipped UG classrooms for theory and laboratories for practical classes. In addition to this, various live units such as goat, fisheries and poultry are also in operation at COA Sumerpur and these are also utilized for UG studies. These laboratories are well equipped with sophisticated instruments. For practical education, the college has well developed Instructional Farms for research and seed Production.

College Campus view

College Building

3.4.1.2.1 Library

The College library has over 4095 books and many National and International Journal including magazines and bulletins. The library is organized on modern lines with open shelf system having sufficient books. There is common reading hall, reading room for news-papers and magazines. The University has got access of *CeRA and J-Gate* facilities. Students of this college and faculty are also provided with internet facilities and through this online/digital access of books.

College Lab and Exam Hall

College Campus

In this College DST and RKYY sponsored projects are also running successfully. Furthermore, smart classrooms with fully equipped with *hi-tech* teaching aids, having facilities of recording lectures in audio-visual format are also established. The college imparts teaching in basic as well as scientific skills with a view of producing competent and practical oriented graduate to handle production and extension in the field of Agriculture.

College Nursery

Experimental plot

3.4.1.2.2 Computer Laboratory

The College is well equiped with computer facilities (25 computers) at the campus for the benefit of students and staff. In addition, computer lab is with internet facility for imparting training to students.

Students working in Computer Lab.

3.4.1.2.3 Hostels

Recently new Girl's hostel with 58 student's capacity is completed with the cost of Rs. 4.50 Crores. The hostel is ready for accommodation in the session 2023-24. For construction of boys hostel Govt. has also sanctioned 4.50 Crores in the session of 2023-24.

3.4.1.2.4 Games & Sports

The college has a track for athletics and an indoor stadium for badminton and Table Tennis having multi-gym facility. Cement paved and night lit basketball and volleyball are the special attractions of the college.

Sports Ground

Sports at COA, Sumerpur

3.4.1.2.5 NSS/Physical Education

Every student of the college takes part in NSS for two academic sessions and also attends a compulsory one-week NSS camp to meet the requirement for undergraduate degree programmes.

3.4.1.2.6 Other Facilities

The college has a placement cell working in collaboration with the Students Welfare Office of the University. The College is having other necessary cells *viz*., IQAC, Women Sexual Harassment Cell, Technical Cell, IPR Cell, Poultry and Goatry Unit *etc*. for betterment of student. The college has taken initiative in the formation of Alumni Association. Canteen is located in the campus. College bus transport students from the college to their experimental sites, farm & KVKs as and when required.

Poultry Unit

Goatry Unit

3.4.1.3 College of Agriculture, Nagaur

The foundation of the College of Agriculture, Nagaur under Agriculture University, Jodhpur was laid down based on point 77 of the 2015-16 budget declared by the Hon'ble Chief Minister and it got ICAR-accreditation in the year 2021. Currently, four-year B.Sc. (Hons.) Agriculture course is running with an intake capacity of 120 students per year. The list of Deans of the college is given in Table 3.14.

Table 3.14: The list of Deans of the college

S.No.	Name	Duration	
		From	To
1.	Dr. K. L. Poonia	12.08.2015	31.07.2016
2.	Dr. M. L. Meena (OSD)	01.08.2016	01.08.2017
3.	Dr. Ishwar Singh (OSD)	02.08.2017	07.06.2018
4.	Dr. M. K. Poonia (OSD)	08.06.2018	22.09.2021
5.	Dr. R. Sutaliya (OSD)	23.09.2021	09.03.2022
6.	Dr. R. Sutaliya	10.03.2022	13.07.2023
7.	Dr. S. R. Kumawat	14.07.2023	Continue

The College was established to transform agriculture from livelihood to a profitable business. The establishment of the college is an important landmark in expanding education as well as scientific research in Agriculture in Western Rajasthan. Nagaur district of Rajasthan is mainly characterized by the production of spices, especially Nagauri Pan Methi and several minerals. College is located at 27.24°N 73.67°E. It has an average elevation of 302 metres (990 feet). It is situated 5 KM from district head quarter on north side NH 62 towards Bikaner.

The college has very good infrastructure facilities, i.e. modern college building, play-ground, research field and college farm, transportation facility, facilities for physically challenged persons, hostel building (Boys and Girls under construction), well-established computer laboratory, practical laboratories with advance types of equipment and all other basic infrastructure facilities recommended. At College, the auditorium of size 100ft x 70ft is being constructed with an overall seating capacity of 540 persons. Provision for CCTV cameras in every class room is also installed.

College Main gate

College Building

3.4.1.3.1 Laboratories

All the Departments are having well equipped UG Laboratories for practical classes. These laboratories are well-equipped with sophisticated instruments. For practical education, the college has well developed Instructional Farm for Agronomy, Horticulture, Genetics and Plant Breeding and Seed Production with one horticulture nursery and mushroom unit. College has a well-equipped computer cum language laboratory facilitated with 25 systems with all the necessary accessories and language learning software is established

Agronomy Laboratory: This Lab. is having instrument like Automated weather station, Stevenson screen, USWB Pan Evaporimeter, Tensiometer, Sunshine recorder, Rain guage, E.C. meter, digital pH meter, digital TDS meter, double ring infiltrometer. etc. for research/ practical purposes.

Soil Science Laboratory: This Lab. is well equiped with instrument like E.C. meter, digital pH meter, digital TDS meter, Tensiometer, Hot air oven, BOD incubator, spectrophotometer, Flame photometer, Kjeldahl apparatus, orbit shaker, hot plate, water bath, muffle furnace, Digital weighing balance, Soil sampling equipment's etc. for research/ practical purposes.

Basic Sciences Laboratory: This Lab. is having instruments like SPAD meter, Leaf area meter, Microwave, Water bath, Refrigerator, Celfrost, Digital weighing balance, Vertical autoclave, Vortex mixture and Muffle furnace for practical purposes.

GPB Laboratory: In this Lab there is instruments like Digital weighing balance, Moisture Meter, Seed Counter, Seed Sample box, Microscope, Tag, Petridis, Conical flask and Hybridization Kitfor practical purposes.

Plant Pathology Laboratory: This Lab. is well equipped with instruments like Laminar air flow, Hot air oven, refrigerator, insecticides and its spraying equipment, centrifuge, B.O.D incubator, Vertical autoclave, Compound microscopes, microwave oven, Hot Plate, Deep Freeze, Plant press, colony counter, electronic weighing balance, diseases specimen display box etc. for practical purposes.

Pathology Laboratory

Students working in Laboratory

Horticulture Laboratory: In this Lab there are instruments like Digital TDS meter, Hand refractometer, Digital weighing balance, Gardening equipments, Lawn Mover for practical purposes

Entomology Laboratory: This Lab. is having Insect collection boxes, Insect specimens for identification, Insect display boxes, killing bottles, Insect sweep nets, aspirators, dissection, stretching boards, magnifying glass, simple microscopes, mounting and preservation, insecticides and its spraying equipment's, glassware's and lab chemicals for student practical purposes

Food Science & Technology Laboratory: This Analytical laboratory facility has been established with all required chemicals and glassware.

Students in Laboratory

Extension Education Laboratory: This Lab has facilities like DLP projector, Television, Camera (HD Video and digital) and Public addressing system for student practical purposes.

Language cum Computer laboratory: CoA Nagaur, has two well equipped computer laboratories with more than 25 Computer system along with all necessary accessories.

Students working in Lab

3.4.1.3.2 Library

A well-equipped library consisting of more than 8000 Text and Reference books of various subjects covering all the courses running. A significant amount of the books are in English and since most of the students are from rural background, books Hindi medium is also available to the students for their better understanding of the subject. Other than academic books, books related to competitive exams, Magazines, Journals are also available in the library.

Competition cell in library

Students in Library

3.4.1.3.3. Classrooms

The college has a eight classrooms each of 60 student capacity and well equipped with ICT infrastructure.

3.4.1.3.4 Games and sports facilities

The college has its own games and sports facilities and provides easy access to students to variety of games and sports such as cricket, volleyball, football, badminton, tennis etc. Many students have shown their excellence at the state and national level tournaments. The college has a sports complex in which a stadium having a track for athletics, Cricket, Football, Basket Ball, Volleyball, Football Ground and indoor games as Chess, Carom & Table Tennis facilities are also available.

NSS/Physical Education

The college is having two units of NSS. Every student takes part in NSS for two academic sessions and also attends a compulsory one week NSS camp to meet the requirement for undergraduate degree programmes.

3.4.1.3.5 Bus and other Facilities

For better transportation and smooth functioning of day-to-day activities, college has a bus, bolero and a tractor. College bus is with 56 seating capacity and used for *to* & *fro* transportation, academic visits and sports tours. The administrative building is an impressive building which houses offices of the Dean, Finance, Establishment, Student Section and Placement cell, Women Sexual Harassment Cell, Technical Cell, IPR Cell, Mushroom and poultry unit etc. All the students enrolled in the college become members of Young Farmers' Association, which encourages students to instil youth leadership, awareness and consciousness towards social issues having relevance to the farming community.

Mushroom unit

Poultry unit

3.4.1.1.6 Hostels

The college is having two hostels, one for Boys, with 36 rooms with a total of 72 accommodation facility. The girls hostel is having 42 rooms with an accommodation facility for 84 girls. Both hostels have their own Mess, Parking and indoor games facility.

Boys Hostel

Girls Hostel

3.4.1.4 College of Agriculture, Baytu

The College of Agriculture, Baytu, Barmer was established on 6th August, 2021 as a constituent college of Agriculture University, Jodhpur as per the announcement of State Govt. in the Budget Session 2021-22 to impart education to the students in the field of agriculture, research advancement and extension of agrotechnology to the farmers. Currently it is imparting a four-year degree programme i.e., B.Sc. (Hons) Agriculture. The college has been allotted 30 ha. of land at Batadoo, Barmer and Rs. 14.2 Crores has been sanctioned by the State Govt. for the purpose of civil works *i.e.* construction of building including administrative block, class rooms, library, laboratories, hostels,

canteen, instructional farm, research farms crop production farm, etc. Possession of the allotted land (Khasra No. 1382/1351) has also been undertaken in the name of College of Agriculture, Baytu. The construction work has been started by the Rajasthan State Agricultural Marketing Board Agency. The foundation stone has been laid by Sh. Harish Choudhary, Hon'ble MLA of Baytu and Former Minister, GoR on 06.08.2023.

Until the college building is constructed in Batadoo, the smooth teaching and learning are being conducted temporarily in the 'Rajasva Parisar' building of Baytu Chimanji Gram Panchayat. The list of Deans of the college is given in Table 3.15.

Table 3.15: The list of Deans of the college

S. No.	Name	Duration	
		From	To
1.	Dr. Ummed Singh	06.08.2021	11.08.2023
2.	Dr. M. M. Kumawat	11.08.2023	Continue

Building front view of COA, Baytu

The college campus is equipped with internet facility to provide the digital facilities to students and staffs for smooth functioning of teaching and other relevant activities. Total intake capacity of the students is 60 for B.Sc. (Hons.) Agriculture programme.

Inside view of COA, Baytu

Students in classroom at COA, Baytu

3.4.1.4.1 NCC/NSS/RVC Units

The college is having functional NSS unit, which is playing important role in awareness of the students about responsibility to the society and making them worthy citizens of the nation. The unit is having strength of 100 volunteers who are regularly contributing in social service activities of maintain cleanliness in and around the educational institute and residential establishments. Awareness programmes through rallies, essay writing, poster making, debate etc. are regularly being conducted by the unit for maintaining hygienic conditions for protection and prevention of contagious and infectious diseases.

3.4.1.4.2 Performance of Students in Cultural Activities

The colleges have organized cultural programme namely '*AAGAJ-2014'* and '*UMANG-2016-22' annually.* The college organizes various cultural activities for students to enrich their cultural growth. Under cultural activities; solo folk dance, solo song, mime, poetry, group folk dance, drama, group song, solo dance, one act play, *mehendi*, *rangoli*, poster making, cartooning etc. have been regularly organized for exploring the intellect of students and expose them diversity of cultural heritage of different regions of the state.

Cultural Programme in Uni-fest

Cultural Programme UMANG-2016

3.4.1.5. Performance of Students in National Examinations

Numerous students of constituent colleges have qualified in the national examinations. A list of student selected in different examinations is given in Table 3.16.

Table 3.16: Student Performance of constituent colleges in National Examinations

S.No.	Year	Examination	Nos.	Name of Students	University
College of Agriculture, Jodhpur					
1.	2016	ICAR-JRF	1	Virendra Singh Shekhawat (Plant Pathology)	AAU, Anand, Gujarat
		BBAU, Lucknow	1	Foziram Meena (Horticulture)	BBAU, Lucknow
2.	2017	ICAR-Non JRF	4	Ramraj Karwasara (Agronomy)	NDRI, Karnal
				Sanjay Kumar (Agronomy)	IGKV, Raipur
				Sandeep Gawadiya (Agronomy)	SVPUAT, Meerut
				Om PrakashYadav (Plant pathology)	SKAU, J&K
		BHU	1	Balwant Singh (Agronomy)	BHU, Varanasi
		BBAU, Lucknow	1	Rameshwar Jangu (Horticulture)	BBAU, Lucknow

S.No.	Year	Examination	Nos.	Name of Students	University
3.	2018	BHU	1	Anita (Entomology)	BHU, Varanasi
		OS quota in SAUs	1	Vijaypal (Plant Pathology)	JNKVV, Jabalpur
		ICAR-Non JRF	4	Narpat Godara (Agronomy)	CSAUAT, Kanpur
				Bhimsen (Plant Pathology)	PAU, Ludhiana
				Anil Kumar (Ext. Education)	PAU, Ludhiana
				Pawan Kumar (Soil Science)	SDAU, Dantiwada
		ICAR-JRF	4	Sapana Choudhary (Agronomy)	GBUAT, Pantnagar
				Manju Choudhary (Agronomy)	SKRAU, Bikaner
				Anuradha (Ext. Edu.)	NDRI, Karnal
				Ashish Prajapati (Soil Science)	GBUAT, Pantnagar
4	2020	ICAR-Non JRF	9	Janak Raj	NAU, Navsari
				Om Prakash Tak	RPCAU, Pusa (Bihar)
				Anil Jakhar	RLBCAU, Jhansi
				Mukesh Prajapat	IGKV, Raipur
				Ashok Kumar Maan	NAU, Navsari
				Srishti Paliwal	RPCAU, Pusa (Bihar)
				Surbhi Jangir	SKNAU, Jobner
				Om Prakash	RPCAU, Pusa (Bihar)
				Shrawan K. Ola	RLBCAU, Jhansi
		ICAR-JRF	5	Sumit Kumar	GBUAT, Pantnagar
				Sarita Jat	SKRAU, Bikaner
				Babu Ram	NDRI, Karnal
				Dilkush Meena	GBUAT, Pantnagar
				Ravina Bishnoi	
5	2021	ICAR-JRF	1	Satish Suman	Agronomy
6	2022	ICAR-JRF	5	Arun Meena	Physical Science
				Suresh Jat	Plant Sciences
				Kapil Parihar	Entomology and Nematology
				Nikhil	Agronomy
				Khushkarandeep Singh	Agronomy
7	2023	ICAR-JRF	18	Rispal Choudhary(Soil Science)	VNMKV, Parbhani
				Nisha Mashee (GPB)	SKUAST, Srinagar
				Pavnesh Meena (Entomology)	IGKV, Raipur
				Rakesh Choudhary (Dairy Ext.)	NDRI, Karnal
				Jugal Kishor (Soil Science)	CAU, Imphal
				Dilip Kumar (Horticulture)	AAU, Jorhat
				Rajesh Kumar (Entomology)	GBPUAT, Pantnagar
				Mohsin Hussain (Ag. Economics)	NDRI, Karnal
				Khushboo Shekhawat (Soil Sci.)	SKUAST, Jammu

S.No.	Year	Examination	Nos.	Name of Students	University
				Soniya Saran (Ext. Education)	AU, Jodhpur
				Abhijit Singh Shekhawat (Agron.)	VU, Ujjain
				Rahul Gurjar (Organic farming)	AU, Jodhpur
				Gopal Ninama (Agronomy)	AU, Jodhpur
				Ravindra Singh Shekhawat (Soil Science)	YSPUHF, Solan
				Apoorva Nirwan (Soil Science)	BHU, Varansi
				Yogendra Singh (Horticulture)	SKRAU, Bikaner
				Rahul Yadav (Agronomy)	SKRAU, Bikaner
				Naveen Kumar Dhakad (Plant Patho.)	JNKVV, Jabalpur
College of Agriculture, Sumerpur					
1	2016	ICAR- Non JRF	4	Bhimraj Jakhar (Animal Husbandry)	BHU, Varanasi
				Nekiram (Animal Husbandry)	BHU, Varanasi
				Samita (Genetics and Plant Breeding)	CCSHAU, Hisar
				Satdev (Soil Sci. and Agril. Chemistry)	NAU, Navsari
2	2018	ICAR-Non JRF	4	Babulal Chaudhary (Soil Sci. and Agril. Chemistry)	BHU, Varanasi
				Uttam Chand (Agricultural Economics)	BHU, Varanasi
				Dwarka Ram (Agri. Entomology)	BHU, Varanasi
3	2023	ICAR-Non JRF	10	Ramesh Kumar(Horticulture)	AU, Jodhpur
				Mehram Meghwal (Agronomy)	AU, Jodhpur
				Ajay Kumar Vishnoi (Soil Science)	SKRAU, Bikaner
				Vikas Kumar (Bio Technology)	MPUAT, Udaipur
				Mukesh Gurjar (Ag. Economics)	MPUAT, Udaipur
				Tejraj Nagar(Animal Husbandry)	MPUAT, Udaipur
				Shasank Sain (Ag. Ext. Edu)	CAU, Imphal
				Ved Prakash (MBA)	ABM, Gandhinagar
				Aakash Kumar (MBA)	MANAGE, Hyderabad
				Mandeep Singh (Soil Science)	
College of Agriculture, Nagaur					
1	2019	ICAR JRF	8	Sunita Kanwar (Soil Science)	SKNAU, Jobner
		State PG		Manisha Choudhary (Horiculture)	SKNAU, Jobner
		State PG		Mangal Sukhi Meena (Entomology)	AU, Kota
		State PG		Mahaveer Meghwal (Soil Science)	SKRAU, Bikaner
		State PG		Ashok Kumar Meena (Horticulture)	AU, Kota
		CAT		Pradhuman Tak (ABM)	SKRAU, Bikaner
		CAT		Aruna Alaria (ABM)	SKRAU, Bikaner
		All India		Papa Ram Bheel (Horticulture)	BBAU, Lucknow
2	2020	ICAR JRF	10	Babita (Soil Science)	RCAU, Pusa Bihar
		ICAR JRF		Anil Jakhar (Agronomy)	Central AU, Jhansi

S.No.	Year	Examination	Nos.	Name of Students	University
		ICAR JRF		Suman Choudhary (Plant Pathology)	Central AU, Jhansi
		ICAR JRF		Sunita Kudi (Plant Physiology)	RCAU, Pusa Bihar
		State PG		Sangeeta Danga (Soil Science)	AU, Kota
		State PG		Hemant Gurjar (Plant Pathology)	AU, Kota
		State PG		Priti Chahar (Soil Science)	MPUAT, Udaipur
		State PG		Neelam Kumari (Entomology)	SKNAU, Jobner
		State PG		Vishnu Dhadhich (Nematology)	MPUAT, Udaipur
		All India		Ankur Pancholi (Horticulture)	BBAU, Lucknow
3	2021	ICAR JRF	11	Saroj Bhati (Animal Husbandry)	SVPUAT, Merut
		State PG		Rajnish Kajla (MBBT)	MPUAT, Udaipur
		State PG		Sarla (GPB)	SKNAU, Jobner
		State PG		Pooja Sharma (Agronomy)	SKNAU, Jobner
		State PG		Abhilasha Kumari (GPB)	SKRAU, Bikaner
		State PG		Rahul Kumar (Ag Economics)	MPUAT, Udaipur
		State PG		Mahendra Jakhar (Horticulture)	SKRAU, Bikaner
		All India		Sanjay Yadav	JNKVV, Jabalpur
		All India		Kailash Chand Jat (Extension)	Nagaland University
		State PG		Prabha Rathore (MBBT)	MPUAT, Udaipur
		All India		Deepak Kumar (Horticulture)	SKUATS, Jammu
4	2022	State PG	10	Shankar Lal Choudhary (GPB)	SKNAU, Jobner
		State PG		Rajlaxmi (Soil Science)	MPUAT, Udaipur
		ICAR JRF		Komal Rathore (Extension Edu.)	JAU, Junagarh
		ICAR JRF		Pooja Nain (Agronomy)	SDAU, Dantiwada
		ICAR JRF		Firoz (Entomology)	JNKVV, Jabalpur
		DST-DBT		Jiya Choudhary (Biotech.)	UAS, Dharwad
		University Exam		Rohit Yadav (GPB)	SHUATS, Allahabad
		University Exam		Prashant Genwa (Ag. Economics)	RVJSAU, Gwalior
		University Exam		Ankita Khakhal (Extension Edu.)	RVJSAU, Gwalior
		University Exam		Meenu Bana (Agronomy)	VGU, Jaipur
5	2023	ICAR-Non JRF	9	Bindu Jaipal (GPB)	AU, Jodhpur
				Lalita (Agronomy)	SKNAU, Jobner
				Nirma (Agronomy)	SKNAU, Jobner
				Anju Ghasil (Agronomy)	SKNAU, Jobner
				Promod (Soil Science)	SDAU, Dantiwara
				Somveer (Entomology)	Dr. RPCAU, Samstipur
				Virendra Meghwal (ABM)	UAS, Dharwad
				Rahul Khatik (Fruit Science)	RLBHCAU, Janshi
				Anchal Panwar (Plant Pathology)	JAU, Junagarh

3.4.1.6 Awards received by the students

Three students of the University received Baroda Achievers Award by the Bank of Baroda Jodhpur (Table 3.17).

Table 3.17: Awards received by the students

S. No.	Award Category	Name of the students	Award Amount (Rs.)
1	Best Academic Level	Sonam Vishnoi, COA Sumerpur	Rs. 31000
2	Best in Sports	Tikam Singh Shekhawat, COA Sumerpur	Rs. 31000
3	All Rounder (Sports, Social Services and Education)	Ms. Nisha Mashee, COA Jodhpur	Rs. 31000

Students receiving Baroda Achievers Award 2023

3.4.1.7. Projects Outcomes

A. DST Projects: The project aims at Enhancing Farmers Livelihood Security in Arid Rajasthan through value addition, Design and Development of Harvester of Kair, Moringa and Nagauri Methi. Duration: 2021-24; Budget Rs. 2,35,97,356/-

Major Achievements

Selection/Identification of SHG group: Selection/Identification of SHG groups was done at Aanwloj, Sayala, Jalore and Palri Ranawata, Bhopalgarh, Jodhpur, Rajasthan. SHG comprising ST women (Anwaloj Mahila Swayam Sahayta Samooh) has been formed under the project in Anwaloj, Jalore. The Mahila Kissan SHG group has been identified in Paldi Ranawatan, Jodhpur to focus on preparation of value-added products of kair and moringa.

Development of value-added products as food and animal feed supplements: Anwaloj Mahila Swayam Sahayta Samooh SHG started value addition in moringa and kair.

Food: Moringa leaf powder for the food, Moringa based roti (mixed with flour and vegetables), Moringa tea, Moringa and rose tea, moringa and citronella tea, moringa rose and citronella tea and Moringa based soap (Bathing).Kair powder, Kair-berry (Kair Chocolates) and Kair Pachakchuran and kair pachakgoli. Animal feed: Moringa based concentrate feed formulation and Moringa herbal Liver tonic.

Developed Kair fruit harvester: Battery operated mechanical Kair fruit harvester was developed and performance evaluation was done.

Developed Prototype of Nagauri Methi harvester: The prototype machine was developed for harvesting and collecting Nagauri methi leaves. The machine is facilitated with adjustment of the height of cut, speed of the cutter bar, speed of the conveyor belt and the speed of the reel.

It is a new innovative method of harvesting for leaves that replaces traditional harvesting practices and improves the quality of harvesting leaves. The machine is self-propelled reaper which operates with 3.5 hp diesel

engine. The size of cutter bar was 1170 mm made up of high carbon steel, 25mm thickness. The time of operation of harvester was found to be 3.5-4 h/ha with a field efficiency 83%. The fuel consumption was 4.5l/ha. Operation and maintenance of leafy harvesters will be easy for farmers. Operation and maintenance of leafy harvesters will be easy for farmers. This may be utilized for harvesting coriander, cress, spinach etc. and under process for testing.

Development of harvester for Kair and Nagauri Methi

Testing of developed kair furit and Methi harvester

B. Tribal State Plan Project: Livestock based integrated farming system with budget Rs. 82.0 Lakhs and Funding Agency is Division of Education, ICAR, New Delhi

Major Achievements

Orientation workshop: Two orientation work shops were organized to sensitize the tribal farmers at Sumerpur-Pali on 17.08.2021, in which 355 tribal farm families participated and second workshop organized at Krishi Vigyan Kendra, Sirohi on 24.08.21, in which 155 farmers were sensitized about the project. One Kishan Ghosthi was organized in Bali block of Pali District, in which 185 were farmers participated.

Skill Development Training Program: Twenty-five skills develop trainings on different aspects of animal husbandry were organized and 760 tribal farm families benefitted in both the districts. Outcome of trainings played significantly role in the attitude of farmers towards the scientific management of animals. Animal husbandry, particularly semi range-based technology, can be viable tool for poverty alleviation among small land holder masses.

On Farm Trial (OFT): Four on farm trials were conducted on participatory mode with tribal farm families. In which 120 farmers participated.

Front Line Demonstrations (FLDs): Four hundred tribal families were benefitted of both the districts. Two hundred farmers were benefitted, 100 each for Lucern in winter season and Sorghum in Kharif season in Pali district.

In total 12,900 improved poultry chicks were provided to 645 tribal farm families in both the districts. Beside this, 1000 chicks were also given in poultry unit of CoA, Sumerpur and CoA, Jodhpur for demonstration purpose and further multiplication.

In all 68 breeding bucks of Sirohi breed were provided to 68 tribal goat farmers for up gradation of local breed in both Pali and Sirohi districts. Goat husbandry has immense potential to uplift socio economic condition of tribal goat farmers. Elite breeding bucks of Sirohi breed provided for grading up the non- descript animals and further conservation the germ plasm within the native region.

In all 52 storage bins were demonstrated among 52 tribal families for safe storage grains.

Storage Bin Distribution by Hon'ble Rajyapal and Hon'ble Vice Chancellor

Awareness camps, Exposure visit etc.: Five exposure visits were conducted for tribal families of both the districts for MPUAT, Udaipur and KVK, Badgaon. As such 250 farmers were benefitted. Four animal Health treatments were conducted in both the districts, in which vaccination, Dosing and distribution of medicines and farmers were sensitizing about the scientific management practices of animals.

C. GEF Project: Mainstreaming agricultural biodiversity conservation and utilization in agricultural sector to ensure ecosystem services and reduce vulnerability (Duration 2017-2023)

Major Achievements: A total of 22047 farmers were identified across the four agro-climatic zones - core villages (9284 farmers across 59 villages), buffer villages (6642 farmers across 58 villages) and control villages (6121 across 36 villages).

Selection of different landraces on farmers' field: The landraces which were selected by the visitors and experts based on the performances and phenotypic character. The short-listed land races for further improvements are as follows: Pearl millet**:** *Surkhaniya, DR-1, Moochwali Bajri,* Pili Bajri and CZP16-923; Mungbean: *GM-4, GM-5,* IPM02-03 and RMG-62; Mothbean: *Jhumka, RMO-40,* CZM-2 and RMO-255; Sesame: *Kala Til, RT-346* and RT-351.

D. NAHEP Project: Agriculture University, Jodhpur was sanctioned NAHEP project in 2018 under "Innovation Grant (IG) for Strengthening of Agriculture University, Jodhpur for Accreditation" to implement effectively and fulfil its objectives. It helped to strengthen the infrastructure and education activities to qualify for accreditation. It also supported technical assistance required to attain accreditation and promote mentoring of agricultural graduates and post graduates with the following objectives:

Major Achievements: In the year 2018-19, the University has contributed significantly in human resource development of different constitute colleges within the University as well as farmers of western Rajasthan. Apart from this, the efforts put forward by the University in the field of entrepreneurship development in agriculture sector among the farmers of western region. Agriculture University, Jodhpur and its two constituent colleges; College of Agriculture, Jodhpur and College of Agriculture, Sumerpur along with UG programme & PG programme of Agronomy, Genetics and Plant Breeding got Accreditation by National Agricultural Education Accreditation Board (NAEAB), New Delhi with 2.59 grade.

Accreditation is the first step for any university to get recognition globally by any national or international institutes/ agencies. Being a newly established university, Agriculture University Jodhpur is still growing to meet the global standards of agriculture education in terms of high quality, resources and facilities. With the financial

assistance of NAHEP, Agriculture University, Jodhpur got accreditation by National Agricultural Education Accreditation Board (NAEAB), New Delhi with 2.59 grades, due to its excellent infrastructure, strength in academic and the facilities available in the interest of students.

Goods and Equipment's for Strengthening of Education: Strengthen the Education, Research and Extension facilities in Agriculture University, Jodhpur and its constituent colleges, University has developed Smart classroom, Library, Sports facilities and laboratories by adding lab equipment's through NAHEP Project.

Table 3.18: List of equipments purchased under NAHEP project

S.No.	Equipment	Purpose/description
1.	Digital Podium	Eight Digital Podium were purchased for College of Agriculture, Jodhpur and Nagaur to develop the smart classrooms.
2.	Automatic Seed Counter	It is required for a number of research observations related to plant breeding and seed technological studies as well as agronomical and horticultural studies.
3.	Fruit Mixer/ Crusher	It is multi-tasking adaptable equipment which can be utilized to blend and grind fruits and vegetables for processing purpose as well as conducting practical exercises related to processing and post-harvest handling of fruits and vegetables of UG, PG and PhD classes.
4.	Microscope with camera	For effective learning high magnification microscope with camera was installed in Plant Pathology, entomology and basic science laboratories. The main objective of the modern microscope was to train the students and researchers in the use of latest techniques as well as use of computers and software for easy, quick and authentic identification of microorganism.
5.	Frozen free deep freezer (Vertical -20°C)	It is used to store bulk of plant tissue sample as such for long time without changing of their original properties. It has a programme of thermostats and temperature monitor systems. It maintains a temperature just below freezing
6.	Insect Boxes	These are used for storing insect specimen on the basis of order and family and display in laboratory for conducting practical exercises and identification of insect pest of local region.
7.	Insect Collection Net	Aerial insect nets are used to collect flying insects. A sweep net is used to collect insects from grass and brush for practical purpose of UG and PG students.
8.	Video Wall	Video wall is a special multi-monitor setup that consists of multiple computer monitors, video projectors, or television sets tiled together contiguously or overlapped in order to form one large screen. Typical display technologies include LCD panels, Direct View LED arrays, blended projection screens, Laser Phosphor Displays, and rear projection cubes. It is used during the common presentation by the PG and PhD students
9.	Auto Clave	It provides a physical method for disinfection and sterilization in laboratory during the practical. Autoclaves operate at high temperature and pressure in order to kill microorganisms and spores.
10.	pH meter	It is an electric device used to measure hydrogen-ion activity (acidity or alkalinity) in solution.
11.	Hot Plate	The hot plate is a vital device that is used in a laboratory to heat samples and dissolving or mixing the chemicals and media. It can be used on a daily basis in laboratory for temperatures as high as 100 degrees and even higher with temperature control systems for over-temperature protection.

S.No.	Equipment	Purpose/description
12.	Digital Weighing Balance	The digital mass balances in the different labs are very sensitive instruments used for weighing substances to the milligram (0.001 g) level.
13.	Automatic Mains Failure (AMF)	It can provide the uninterrupted Power Supply System through AMF (Automatic Mains Failure). AMF automatically turns on the electricity generator whenever power goes off and *vice-versa*.
14.	Insect Killing Bottles	This equipment's are being used for killing and preserve soft bodied insects in vials of ethanol.
15.	Refractometer	It is a simple optical instrument for measuring the dissolved solids content of fruits, grasses and vegetables during all stages of growth. Refractometers work on the principle of light bending when it passes from air into water.
16.	Agrometeorological equipments.	Agro-meteorology, one of the most important subjects of UG programme and course having theory and practical part. It is mandatory to learn how to record weather data from meteorological instruments and how to interpret it.
17.	Music System	All in one music system with cordless mike was purchased it is used during the programme like cultural activities, sports and celebration of important National & International days.

Strengthening of Library under NAHEP: Under this project the University library has a quantum of recommended text and reference books to meet out the requirements of the undergraduate and postgraduate course programmes of the constituent's colleges. The total cumulative holdings as number of books are 10,000. Library also subscribes 20 Journals and Magazines of national and international repute. Special collection of newly published and recommended books and other documents procured for competitive examinations such as Pre-PG exam, ICAR entrance exam, JRF, SRF, ASRB, NET and other competitive examinations is available to the UG and PG students and faculty members, which provides unique opportunity to retrieve references on their subject interest under the NAHEP Project.

Software Purchase under NAHEP: Software for statistics, plagiarism and software programme for research students were procured under NAHEP Project.

Table 3.19 List of software along with the specifications procured

S.No.	Software	Specifications	Benefits
1	Windostat (Statistical Software)	Three Modules (Advance biometrics, Agronomy and Entomology), Recorded in CD's, Compatible with window 95, 2K, XP, Vista, Win 7 etc	Statistical Analysis for most of the problems related to Biometrics, Agronomy and Entomology, Easy to handle, output are relevant to agricultural research, clear graphical representation, Most relevant statistical software of Agricultural research
2	PlagScan (Plagiarism Software)	One Year License, 3000000 words and 250 User, Provide Plagiarism %, Downloadable Report, API Integration, Doc Vs Doc Comparison, Multiple Document Check, Email Notification 250 user	Plagiarism Detection software works with all common file formats, uploaded Plag Scan documents will never be shared with unauthorized third parties, printable PDF-file, source list which are match with document are provided with percentage, report cab be download

S.No.	Software	Specifications	Benefits
3	Tally	ERP-a silver	Tally software helps in the establishment of keeping all data record of the university in simpler or easy way. It also ensures smooth calculation and makes banking simpler in terms of collection of fees and dues of the student.
4	Barcoding Software	-	Total 3 units of Barcoding software has been procured for library strengthening which helps in proper management of books and journals in the library, which also helps in less paper work and exact timing of in-out of books and journals.

Human Resource Development under NAHEP: AU Jodhpur had conducted many National and International training/Short visit/Seminars activities under this project for faculties and students.

Table 3.20 Faculties attended trainings/ Symposium and National and International Organization

S.No.	Name & Designation of faculty	Training/Conference/ Seminar/Attended	Duration
National Training			
1.	Ms. Sumitra Devi, SMS (Agronomy)	Training, Cooch Behar, West Bengal	10-16 Jan, 2019
2.	Dr. Rakesh Choudhary, Assistant Professor (Agronomy)		
3.	Mrs. Hansa Lakhran, Assistant Professor (Agronomy)		
4.	Mr. Rohitash Bajiya, Assistant Professor (Agronomy)		
5.	Dr. Moola Ram, Assistant Professor (Agronomy)		
6.	Dr. Manmohan Puniya, SMS (Agronomy)		
7.	Dr. Pravin Rangrao Patil, Assistant Professor (Soil &Water Conservation Engineering)		
8.	Ms. Rekha Sodani, Assistant Professor Plant Phisiology		
9.	Dr. Dharmendra Meena, Assistant Professor (Agronomy)		
10.	Dr. Arjun Lal Bijarnia Assistant Professor (Agrostology)		
11.	Dr. Hari Dayal Choudhary, SMS Agronomy		
12.	Dr. Hari Ram, SMS Agronomy		
13.	Dr. Aabha Parashar, SMS Agronomy		
14.	Ms. Kamini Parashar, SMS Agronomy		

S.No.	Name & Designation of faculty	Training/Conference/ Seminar/Attended	Duration
15.	Dr. Shalini Pandey, Assistant Professor (Entomology)	Hands on training on advances in pesticide residue analytical techniques (Hesaraghatta, Bengaluru)	16-19 Jan, 2019
16.	Dr. Shourabh Joshi, Assistant Professor (Plant Biotechnology)	Strengthening of Seed System in the North Eastern and Unreached Regions-Problem, Prospectus and Policies (Imphal, Manipur)	3-5 Feb 2019
17.	Dr. Neeshu Joshi, Assistant Professor (Agronomy)		
International			
18.	Dr. Dinesh Kumar, Asstt. Professor (Mathematics)	International Conference on Applied Analysis and Mathematical Modeling, (Istanbul, Turkey)	10-13 March, 2019
19.	Dr. Piyush Pradhan, Asstt. Professor (Farm Machinary and Power Engineering)	ISER International Conference on Agricultural and Biological Science (Putrajaya, Malaysia)	19-20 March, 2019
20.	Dr. M. M. Kumawat, Assoc. Professor (Entomology)	International Conference on Management of Diamondback Moth and other crucifer Insect Pest (Tainan, Taiwan)	4-8 March, 2019
21.	Dr. M. Msundria, Assoc. Professor (Entomology)		
22.	Dr. Dama Ram, Asstt. Professor (Plant Pathology)	International Conference on Bioscience and Biotechnology (Kuala Lumpur, Malaysia)	21-22 Feb, 2019
23.	Dr. Vinod Kumar, Asstt. Professor (Plant Biochemistry)		
24.	Dr. Supriya, Asstt. Professor (Plant Biotechnology)	International Conference on Genetic Engineering and Biotechnology (ICGEB-2019), (Singapore)	28-29 March, 2019
25.	Dr. Ummed Singh, Professor (Agronomy)	13th International Conference on Development of Drylands (CAZRI, Jodhpur)	11-14 Feb 2019
26.	Dr. Santosh Choudhary, Asstt. Professor (Horticulture)		
27.	Dr. Krishna Saharan, Asstt. Professor (Microbiology)		
28.	Dr. Piyush Pradhan, Asstt. Professor (FMPE)		
29.	Ms. Sarita, Ph.D. Scholar		
30.	Dr. Vinod Kumar, Asstt. Professor (Plant Biochemistry)	International conference on Biotechnological Research and innovation for sustainable development at CSIR-IICT, Hyderabad	22-25 Nov., 2018
31.	Dr. Shourabh Joshi, Asstt. Professor (Plant Biotechnology)	Strengthening of Seed System in the North Eastern and Unreached Regions-Problem, Prospectus and Policies (Imphal, Manipur)	3-5 Feb 2019

S.No.	Name & Designation of faculty	Training/Conference/ Seminar/Attended	Duration
32.	Dr. Rajdeep Mundiyara, Asstt. Professor (GPB)	Entrepreneurship & Innovation in Agriculture for Socio-Economic Empowerment of Farmers, SKRAU, Bikaner	12-13 March 2019
33.	Dr. Manju Kumari, Asstt. Professor (Plant Pathology)	ISMPP 39th Annual Conference & National Symposium, IIPR, Kanpur	16-18 Nov,2018
34.	Dr. Dama Ram, Asstt. Professor (Plant Pathology)	ISMPP 39th Annual Conference & National Symposium, IIPR, Kanpur	16-18 Nov,2018
35.	Dr. L. Netajit Singh, Asstt. Professor (Agril. Statistics)	International workshop on advance R and R-QTL mapping (ICRISAT, Hyderabad)	3-7 Dec. 2018

Table 3.21: List of faculties participated at national trainings programme

S. No.	Theme	Organized by	Date	Venue	No. of participants
1.	Preventive Vigilance & e-procurement: Key to Good Governance	National Productive Council, Jaipur	June 24 to 28, 2019	Mount Abu, Rajasthan	4
2.	Financial and Administrative Training Program for Non-Teaching Staff of Agriculture University, Jodhpur	ICAR-NAARM, Hyderabad	June 29 to July 05, 2019	Agriculture University, Jodhpur	20
3.	Competency Enhancement of Non-teaching Staff in the field Financial and Administrative Management	HCM-RIPA, Jodhpur and AU, Jodhpur	Aug. 19 to 30, 2019	HCM- RIPA, Jodhpur	30
4.	Workshop on "Academic Management System" at Agriculture University, Jodhpur	ICAR-IASRI, New Delhi	Oct. 04-05, 2019	Agriculture University, Jodhpur	33

Table 3.22: List of faculties participated at International Training Programmes

S.No.	Name & Designation	Title & Place	Duration
1.	Dr. Ummed Singh, Dean and Professor (Agronomy)	Education for Smart Agriculture (Colorado State University, Fort Collins, Colorado, USA)	19 Feb-08 March, 2019
2.	Dr. Jeeva Ram Verma, Assoc. Professor (Plant Pathology)	Conservation Agriculture and Agricultural Innovations for Rainfed Drylands (ICARDA, Rabat, Morocco)	18-23 March, 2019
3.	Dr. Moti Lal Mehriya, Asstt. Professor (Agronomy)		
4.	Dr. Rahul Bhardwaj, Asstt. Professor (GPB)		
5.	Dr. Neelam Geat, Asstt. Professor (Plant Path.)		
6.	Dr. Richa Sachan, Asstt. Professor (Extension Education)		
7.	Dr. Vikas Pawariya, Asstt. Professor (Agril. Economics)		
8.	Dr. Vikram Singh Meena, Asstt. Professor (GPB)		

3.4.1.8 Trainings and Workshops

1. One-day workshop for creating awareness among passing out students for opting Agriculture as Career: The College of Agriculture, Jodhpur organized the one-day sensitization Workshop on 17th February 2020 at auditorium of ARS Mandor, Jodhpur under the sponsorship of NAHEP (National Agricultural Higher Education Project Component 2A), New Delhi for constituting awareness among passing out students of schools for opting Agriculture as career for Jodhpur district.

Workshop at CoA, Jodhpur (17th February 2020)

2. Training Program on "Data Driven Agriculture: A Statistical Analysis Training using R"

To equip agricultural professionals with statistical analysis skills and promote data-driven decision making, University organized a virtual training programme over a span of five days (from 23rd May to 27th May 2023) entitled "Data Driven Agriculture: A Statistical Analysis Training using R" was organized virtually at COA Sumerpur considering the expenditure associated with organizing this training programme. A total of 403 International and National delegates participated in the training programme successfully.

3.4.2 Faculty of Dairy Technology

The Faculty of Dairy Technology has been sanctioned by Govt. of Rajasthan to scatter the needs of dairy industries in the State of Rajasthan in the budget 2020-21 as a constituent faculty of Agriculture University, Jodhpur. The faculty started its functioning from the Academic Session 2020-21 at University headquarter. The Faculty of Dairy Technology, Jodhpur was approved by All India Council for Technical Education (AICTE) wide letter F.No. North-West/2021-22/1-9480632393 dated 15th July, 2021.

Agriculture University, Jodhpur provides B. Tech. (Dairy Technology) degree under the Faculty of Dairy Technology that focuses on the study of milk and milk products. It provides numerous career opportunities in the dairy industry, including production, quality control, research and development, and marketing. The dairy industry is under pressure to become more sustainable and B. Tech. (Dairy Technology) graduates can work towards developing sustainable practices in the dairy industry such as reducing waste and improving animal welfare.

3.4.2.1. College of Dairy and Food Technology (CDFT), Jodhpur

The College of Dairy and Food Technology (CDFT), Jodhpur is constituent college of Agriculture University under the faculty of Dairy Technology. It started in the year 2020 with the intake capacity of 40 seats for the UG

programme. From session 2023-24 started B. Tech. (Food Technology) under this faculty. CDFT Jodhpur delivers quality based technical education for the development of well-trained human resource through its UG programme offered in the field of Dairy Technology. Government has allotted land to this College at Village Sawant Kuan, Tehsil Baori on Nagaur Road with financial sanction of Rs. 16.0 crores for construction of Administrative building, Academic buildings, Departments of the college, Hostels and also development of instructional farms. The foundation stone has been laid by Sh. Ashok Gehlot, Hon'ble Chief Minister Govt. of Rajasthan on 11.11.2022. The construction works of campus is in progress at newly allotted land.

3.4.2.1.1 Laboratories

There are well facilitate Laboratories with Dairy equipments and machineries

Computer Lab: There is a Computer lab. with 25 computers to access the online resources and database.

Pilot Dairy Plant (Milk Pasteurization Unit): HTST pasteurizer, cream separator, milk homogenizer

Dairy Technology: Centrifugal cream separator, refrigerator, deep freezer, stirrer, mathani machine, induction plate, bursting strength tester, compression strength tester, hot air oven, pH meter, digital thermometer, weighing scale and bottle sealing machine etc.

Milk Pasteurization Unit

Dairy Lab.

Food Technology: Bakery oven, OTG, microwave, noodle and pasta maker, dough mixer, fruit pulper, flour mill, BOD incubator, oil seed extractor, pH meter, refractometer, juicer cum grinder, carbonation machine, refrigerated centrifuge, hot air oven, pH meter, steam jacketed kettle, digital thermometer and sieve set etc.

Dairy Chemistry and Microbiology: Equipped with UV-VIS spectrophotometer, colorimeter, flame photometer, fibre estimation system, Soxhlet instrument, pH meter, analytical balance, muffle furnace, automatic titrator, autoclave, water double distillation unit, single distillation unit, milk analysis assembly, calorimeter, refractometer, Butyro refractometer, Gerber centrifuge, laminar cabinet, compound microscope, simple centrifuge, BOD incubator, magnetic stirrer, hot air oven, serological bath, centrifuge, rotary shaker etc.

Food Technology Lab.

Dairy Chemistry & Microbiology Lab.

Dairy Engineering: Equipped with its workshop which is having instrument like electric welding machine, power saw, gas welding machine, universal wood working machine, bench-vice, files, cutters, hammers, pipe bending machine etc. along with electric engineering instruments such as digital multimeter, auto transformer, DC regulated power supply, voltmeter, ammeters, Wattmeters, resistance box, tachometers, conductivity meter, micrometer, vernier calliper, T-bevel, measuring wheel, IR thermometer etc.

3.4.2.1.2 NCC/NSS/RVC Units and Celebration of Important Days

The college is having functional NSS unit, which is playing important role in awareness of the students about responsibility to the society and making them worthy citizens of the nation. The unit is having strength of 100 volunteers who are regularly contributing in social service activities of maintaining cleanliness in and around the Educational Institute and Residential Establishments. Awareness programmes through rallies, essay writing, poster making, debate etc. are regularly being conducted by the unit for maintaining hygienic conditions for protection and prevention of contagious and infectious diseases.

3.4.2.1.3 Cultural Activities

The college organizes various cultural activities for students to enrich their cultural growth. Cultural activities like solo folk dance, solo song, mime, poetry, group folk dance, drama, group song, solo dance, one act play, *mehendi*, *rangoli*, poster making, cartooning etc. have been regularly organized for exploring the intellect of students and expose them diversity of cultural heritage of different regions of the state as well as country. The college has organized cultural programme namely '*UMANG-22'* annually.

3.4.3 Faculty of Agriculture Engineering

Faculty of Agriculture Engineering was sanctioned by the Government of Rajasthan and started in the year 2020-21.

3.4.3.1 College of Technology and Agriculture Engineering, Jodhpur

The College of Technology and Agriculture Engineering, Jodhpur was established under the Faculty of Agriculture Engineering in the Academic Session 2020-2021 and started functioning at University headquarter. It is the second CTAE College of Rajasthan and it offers four years B. Tech. (Agriculture Engineering) Degree Programme with an intake capacity of 40 students per year (including payment seats).

The Government of Rajasthan has allotted land for this college at Sawant Kuan, Nagaur Road, Jodhpur and sanctioned Rs. 16.0 Crores for construction of administrative building, academic buildings, various departments of the college, proposed hostels and development of instructional farms. The foundation stone has been laid by Sh. Ashok Gehlot, Hon'ble Chief Minister, Govt. of Rajasthan on 11.11.2022. The construction works of campus is in progress at newly allotted land, Sawant Kuan, Nagaur Road, Jodhpur. In Jan., 2024, the CTAE has been shifted to CAIRN Centre of Excellence, Near IIT Campus, Nagaur Road, Jodhpur.

Academic Development: The College is committed to provide need-based quality education in all the major discipline of Agriculture Engineering viz. Soil and Water Conservation Engineering, Farm Machinery and Power Engineering, Agricultural Processing and Food Engineering, Irrigation and Drainage Engineering and Renewable Energy Engineering to make the students competent enough to contribute towards agricultural and rural development as well as to educate the students to play an active role in agricultural and industrial growth, satisfying present and future needs of the society through development and implementation of revolutionary technologies for prosperity of the nation. Agricultural Engineering embraces the following five major disciplines:

1) Farm Machinery and Power Engineering (FMPE)
2) Agricultural Processing and Food Engineering (APFE)
3) Soil and Water Conservation Engineering (SWCE)
4) Irrigation and Drainage Engineering (IDE)
5) Renewable Energy Engineering (REE)

Library: The library is organized on modern lines with open shelf system having 2390 books. Large collection of e-books is also available for student's reference. There is common reading hall, reading room for news-papers and magazines. For the benefit of students and staff, a reprographic section is also attached to the library. Students are also provided with internet facility for accessing Research journals. Book bank facility is also available to the students.

Computer Centre/CAD lab.: The college is equipped with advanced computer lab facility with internet connectivity for conducting the practical's/imparting hands-on training to the students. The computer lab is facilitated with CAD software for practical purpose.

Training and Internship: The students of B. Tech. (Ag. Engg.) Part II and Part III of the Academic Year 2023-24 have participated in 02 weeks and 04 weeks skill development trainings, respectively, at renowned central and state government institutes, such as:

1. Central Farm Machinery Training and Testing Institute, Budni, MP (a Govt. of India organization).
2. North Eastern Region Farm Machinery Training & Testing Institute, Assam (a Govt. of India organization).

3. Southern Region Farm Machinery Training and Testing Institute, Anantapur, (A.P) (a Govt. of India organization).
4. Swami Keshwanand Rajasthan Agricultural University, Bikaner, Rajasthan.
5. Indian Institute of Technology, Jodhpur, Rajasthan (a Govt. of India organization).
6. ICAR-Central Arid Zone Research Institute, Jodhpur, Rajasthan (a Govt. of India organization).

The main aim of trainings at the renowned organizations is to gain knowledge with hands-on-training on the operation and maintenance of different equipments, machinery, implements, etc.


Training Activities

Sports Activities: The students of B. Tech. (Ag. Engg.) Part I and Part II of the College of Technology and Agriculture Engineering, Jodhpur actively participated in Inter Collegiate Games and Sports Meet held at Nagaur during December 10-12, 2022 and in which secured the following positions (Table 3.23).

The students also participated in Races and Badminton in 21st All India Inter Agricultural University Games and Sports Meet, 2022-23 organized at CCS HAU, Hisar during February 20-24, 2023.

Table 3.23: Position of students participated in Games and Sport Meet

S.No.	Name of Students	Class	Event	Position
1.	Naman Kajla	B. Tech (Ag. Engg.) Part II	Badminton	Runner up
2.	Rudra Pratap Singh Jhala	B. Tech (Ag. Engg.) Part I	Badminton	Runner up
3.	Harish Choudhary	B. Tech (Ag. Engg.) Part II	Badminton	Runner up
4.	Mahendra Singh Jhala	B. Tech (Ag. Engg.) Part I	Badminton	Runner up
5.	Surendra Mali	B. Tech (Ag. Engg.) Part I	1500 Metre	First Position
6.	Surendra Mali	B. Tech (Ag. Engg.) Part I	800 Metre Race	First Position
7.	Surendra Mali	B. Tech (Ag. Engg.) Part I	400 Metre Race	Third Position
8.	Vinod Kumar	B. Tech (Ag. Engg.) Part I	200 Metre Race	Second Position
9.	Hemlata Saran	B. Tech (Ag. Engg.) Part I	400 Metre Race Girls	First Position
10.	Abhishek Choudhary	B. Tech (Ag. Engg.) Part I	Long Jump Boys	Third Position


Participation of students in Games and Sports Meet

Cultural Activities: The students have been participating actively the cultural programmes held during various special occasions of the University and also participated in the Inter Collegiate Literary and Cultural Events conducted at College of Agriculture, Jodhpur during December 17-19, 2022. College achieved significant positions in the cultural events like in Clay Modelling, Aditya Chasta got first position and in patriotic song Afsha Mugal, Vishapa Kachhawaha, Hemlata Saran, Abhishek Choudhary & Mahendra Singh Jhala got second position.


Participation in Cultural Events

Two students of the college participated in 21st All India Inter Agricultural University Fest, 2022-23 conducted at the University of Agricultural Sciences, Bangalore (Karnataka) during March 13-17, 2023.

NSS Activities: The students of College of Technology and Agriculture Engineering, Jodhpur are regularly taking part in the National Service Scheme (NSS) activities. The NSS aims in developing the inner potentialities and transforming the students mentally to fit into the society to which he/she belongs. With the objectives of NSS, it is there to develop multidisciplinary personality of the student youth so as to gain skills in mobilizing community participation, acquire leadership qualities and democratic attitudes, develop capacity to meet emergencies and natural disasters, etc. along with their academics.

Aim and Motto

- The aim of the NSS is Education through Community Service.
- The motto of NSS is "Not Me But You".

The NSS Unit of CTAE, Jodhpur has been fulfilling the objectives of NSS by encouraging and supporting active participation of youth in the process of socially valuable and nation building activities, as well as it has also been important in development of personality of the youth. NSS Activities have been regularly organized by the NSS Volunteers, where they helped to make campus area clean and green by maintaining the gardens of the campus. It has also developed the spirit of team work in the NSS volunteers. Diverse NSS activities have been regularly conducted at CTAE, Jodhpur.

3.4.4 MBA in Agri Business Management

The University has started MBA programme in Agri Business Management in academic year 2023-24 with intake capacity of 40 seats. The programme has been accredited by AICTE.

4. Directorate of Extension Education

Directorate of Extension Education is a Nodal Agency of Agriculture University Jodhpur responsible for transfer of agricultural technology in the state especially in Western Rajasthan through extension services including training, farm advisory services, on farm testings, demonstrations, agro-met advisory services since 2013. For enhancing the transfer of technology, ICAR has established Krishi Vigyan Kendras (KVKs) in each district of the state, out of which eight KVKs are under the administrative control of the University. Extension services are offered by a team of multi-disciplinary scientists who performs their excellence in participatory mode in close co-ordination with various agencies outside and units within the University. The Directorate provides backstopping, continuously monitor and evaluate the extension programmes of the eight KVKs. Three basic functions of the Directorate of Extension Education are training, advisory and communication.

4.1 Mandate

- Organization of short and long-term vocational trainings for farmers, farm women, school drop outs and unemployed youth in agriculture and allied fields for self-employment and livelihood security.
- Creation of healthy linkage between research and extension centers (KVKs and ATIC) for transfer of proven technologies of agriculture and allied fields to the farmers and at the same time transfer of farmers feedback to research system.
- Monitoring and evaluation of KVKs and ATIC activities on regular basis for achieving their objectives.
- Organization of agricultural extension programmes at headquarters level and through KVKs to show the impact of new technologies at farmer's field.
- Assessment and refinement of latest proven agricultural technologies through on farm testing (OFT) and frontline demonstration (FLD) under various agro-climatic conditions.
- Work as a resource and knowledge centre of agricultural technologies for supporting initiatives of public and voluntary sector for improving the agricultural economy of the state, especially Western part of the state.

4.2 Director Extension Education

The Directorate of Extension Education, AU, Jodhpur was established on 19th Oct. 2013. The Directorate of Extension Education is headed by Director Extension as given below:

Table 4.1: List of Director Extension Education holding the charge

S.No.	Name	Period
1.	Dr. Ishwar Singh	19.10.2013 to 28.02.2017
2.	Dr. B.S. Bhimawat	01.03.2017 to 23.10.2017
3.	Dr. Ishwar Singh	24.10.2017 to 30.11.2023
4.	Dr. Pradeep Pagaria, Assoc. Director (Acting)	01.12.2023 to 14.01.2023
5.	Dr. V. S. Jaitawat	15.01.2024 to 31.05.2024
6.	Dr. Pradeep Pagaria, Assoc. Director (Acting)	01.06.2024 to Continue

4.2.1 Extension Education Council Meeting

The Extension Education Council (EEC) is the highest extension body of the AU, Jodhpur that has the responsibilities and functions of formulating the extension policy and providing appropriate directions. The EC is chaired by the Vice-Chancellor and the Director Extension Education serves as Member-Secretary. The meetings of Extension Education Council of Agriculture University, Jodhpur are held regularly. All activities of DEE along with the projects submitted by DEE are being discussed in these meeting and necessary approval is taken before implementation of the programmes. The dates of EECs meetings held at Jodhpur are as follows:

Table 4.2: Extension Education Council meetings held at AU, Jodhpur.

S.No.	Date of the Meeting	No. of Meeting	S.No.	Date of the Meeting	No. of meeting
1.	07.07.2016	I	6.	24.12.2021	VI
2.	30.07.2017	II	7.	05.8.2022	VII
3.	16.03.2019	III	8.	22.08.2023	VIII
4.	04.06.2020	IV	9.	01.05.2024	IX
5.	17.03.2021	V			

4.3 Major Activities

4.3.1 Farmer Fairs

DEE, AU, Jodhpur have organized 10 Farmers fair including one Western Regional Farmers Fair, one Divisional level Farmers fair and Eight State/District Level Fairs. In all, more than one lakh farmers have participated in these fairs. Western Regional Farmers Fair (2018) sponsored by Department of Extension, Ministry of Agriculture and Farmer welfare, GOI whereas One Divisional level Farmers fair was organized at AU, Jodhpur on Dated 30 June-1 July,2023 and Eight State Level Fair were financially supported by State Government.

Table: 4.3: Farmer Fairs organized by Agriculture University, Jodhpur

S.No.	Theme of Fair	Venue	Date & Year	No. of Participants	Sponsoring Agency
1.	District Level farmers fair	AU- Jodhpur	9 February-2016	1700	ATMA, Jodhpur
2.	District Level farmers fair	AU- Jodhpur	15 September-2017	1500	ATMA, Jodhpur
3.	Western Region Agriculture Fair (RAF-2018)	AU- Jodhpur	28-31 January,2018	10500	MOA&FW, GOI
4.	Agriculture Fair	KVK Gudamalani	24 March,2019	600	MOA&FW, GOI
5.	PM-Kisan Samman Nidhi Mela	KVK Gudamalani	9 June,2019	1200	MOA&FW, GOI
6.	Kisan mela	KVK Gudamalani	24 Feb.,2020	1500	MOA&FW, GOI
7.	Jal Shakti Abhiyan Kisan mela	KVK, Sirohi	3 September,2020	1300	ICAR-ATARI, Jodhpur
8.	State Level Farmer fair	KVK Gudamalani	6 March,2021	850	SC-SP Plan ICAR, NIAP-New Delhi
9.	State Level Farmer fair	KVK Gudamalani	17 September,2021	2500	ICAR, NIAP-New Delhi
10.	Divisional level farmers Fair	AU, Jodhpur	30 June-1July,2023	24000	DOA, Govt. of Rajasthan

Divisional level Farmers Fair at AU, Jodhpur, 30 June-1st July, 2023

Farmers fair at KVK Gudamalani, 17th September, 2021

Western Region Agriculture Fair at AU, Jodhpur, 28-31st January, 2018

4.3.2 State Level Seminar cum Training Programme and Buyer seller meet on Pomegranate

The pomegranate area is continuously increasing in Barmer, Jodhpur and other parts of the state. For improving knowledge and awareness on pomegranate production and to overcome the problems presently intervened by farmers, DEE has organized one State Level Seminar cum Training Programme on Pomegranate during 3rd-4th Oct., 2018. About 350 progressive farmers from Barmer (Budiwara, Jagsa and Padru villages) and other part of region participated in the seminar. Experts from Pomegranate cultivation from NRC on pomegranate, Solapur (MH) delivered lectures in two days event. To provide marketing support to the pomegranate producers, the buyer-seller meets are being conducted time to time to provide the producers better marketing strategies and sell their produce at higher price. In these meets, various scientists also participated from NRC on Pomegranate, Sholapur (Maharashtra) to address different constraints in pomegranate production and officials from APEDA provided detailed guidance for export promotion as well as financial support for the same. In this meet, 300 innovative pomegranate farmers and 25 exporters from various parts of country participated. These meets were sponsored by APEDA.

4.3.3 Backstopping Trainings

To design and develop better extension services for farming community DEE regularly conducts these trainings in which KVK staff is trained to enhance their knowledge and skills.in this context, in past decade DEE conducted various programmes time to time mainly trainings on *"Advances in Production and Post-Harvest*

Management of Arid fruits and Medicinal Crops" for Scientist and Technical Staff during 18th-19th Jan 2016. In this 22, SMS and officers participated in the trainings. Another backstopping training on "*Advances in Production and Post-Harvest management of Seed Spices and Arid Fruits"* was organized from 12th -14th March, 2020. A three days national level training on "Soil Testing and Water Quality Assessment" from 29th June to 1st July, 2021 was conducted. Other than these few more trainings were conducting particularly on Post Harvest technologies, Natural farming, one KVK one product, Millet Production Technologies, Live-stock management, Value addition etc.

4.3.4 Scientific Advisory Committee meetings at each KVK

Directorate of Extension Education organizes SAC meeting at each KVKs every year in which the activities of the past year are presented along with the work plan for the next year by each scientist. In this meeting, scientist from ATARI Zone-II, University officers and officers from all line departments participate actively.

4.3.5 Monthly Review Meeting of KVKs

Every month Directorate of Extension Education organizes monthly review meetings. In this meeting the work of past month is reviewed and the plan of work for the coming month is presented so that suggestions can be incorporated. Each KVK presents all the ongoing works related to FLDs, OFTs, Seed Production, Trainings (on campus & off campus), feedback from farmers, status of live units etc.

4.3.6 One KVK one product

Under this activity, each KVK is assigned to make one product from locally available farm field produce. The aim of this activity is to promote local products at large scale and encouraging farmers to make more products from their own farm produce and earn extra income.

Table: 4.4: List of products developed by KVKs

S.No.	Name of KVK	Product
1.	Jalore	Bajra Biscuit and Nutri dalia
2.	Sirohi	Funnel Products – RTS & Mukhwas
3.	Nagaur	Pickles and Nagauri Methi
4.	Maulasar	Aonla Product, Panchkutta
5.	Gudamalani	Bajra Biscuits, Bajra Puffed seed and Processed Cumin
6.	Phalodi	Ker, Sangari and Panchkutta
7.	Raipur-Pali	Sojat mehndi

Products launching by Sh. Kalraj Mishra Hon,ble Governor of Rajasthan

4.3.7 State level Agricultural Exhibitions

Directorate of Extension Education showcases various Agro-techniques, models of live units and products developed by university at various National and State level farmers fairs. In the last 10 years, around 20-25 exhibitions have been organized showcasing various techniques to enhance farmer's income. In 2021 DEE, AU Jodhpur awarded 1st rank in exhibition at Farmers fair organized by SKNAU, Jobner.

Table 4.5: Exhibitions organized by the DEE

Date and duration	Place	Occasion	Important Visitors
9-11, Nov.,2016	Jaipur	GRAM-2016	Hon'ble Chief Minister Smt. Vasundra Raje and her Cabinet Minister
24-26th, May, 2017	Kota	GRAM-2017	Hon'ble Chief Minister Smt. Vasundra Raje and her Cabinet Ministers
23rd Sept., 2017	CAZRI Jodhpur	Kisan Mela and Farmer's Innovation Day	Hon'ble Vice Chancellor, SKNAU, Jobner, Prof. P. S. Rathore and Prof. G. L. Keshwana, Hon'ble Vice–Chancellor, Kota Agriculture University, Kota
07-09th Nov., 2017	Udaipur	GRAM-2017	Hon'ble Chief Minister Smt. Vasundra Raje and her Cabinet Minister
23 Dec., 2017	Nagaur	Kisan Diwas	Minister of State, Consumer Affairs, Food and Public Distribution, Commerce and Industry, Sh. C.R. Chaudhary,
28-30th Jan., 2018	AU, Jodhpur	Western Regional Agriculture Fair	Hon'ble Ex-Governor Mizoram Sh. Amolak Rattan Kohli, Minister of State, Consumer Affairs, Food and Public Distribution, Commerce and Industry, Sh. C.R. Chaudhary, Rajya Sabha Member, Government of India, Sh. Narayan Lal Panchariya.
13-14th April, 2018	AU, Jodhpur	State Level Workshop on Onion and Garlic	Dr Brijendra Singh, Head, NHRDF, New Delhi, Dr. S.P. Singh, Joint Secretary, Department of Agriculture, Govt. of Rajasthan, Dr. S. K. Singh, Director, ATARI, Jodhpur
13-15th Sept., 2018	CAZRI, Jodhpur	Farmer fair	Hon'ble State Minister of Agriculture, Ministry of Agriculture & Farmer welfare, Govt. of India, Sh. Gajendra Singh Ji,
29th Sept., 2018	CSWRI. Tonk	Sheep & Wool Farmer fair	Hon'ble Minister of Agriculture, Ministry of Agriculture & Farmer welfare, Govt. of India, Sh. Radha Mohan Singh Ji.
16th Sept.,2019	CAZRI, Jodhpur	State level Farmer Fair	Hon'ble State Minister of Agriculture, Ministry of Agriculture & Farmer welfare, Govt. of India, Sh. Kailash Ji Choudhary.
8th Nov., 2019	Nandra Kalan	Hon'ble Governor of Rajasthan Visit	Hon'ble Governor of Rajasthan Sh. Kalraj Mishra.
22-26th February, 2021	SKNAU, Jobner	Kisan Mela 2021	Hon'ble, Minister of Agriculture, Govt. of Rajasthan Sh. Lal Chand Kataria.
6th March, 2021	KVK, Gudamalani	Kisan Mela 2021	Hon'ble State Minister of Agriculture, Ministry of Agriculture & Farmer welfare, Govt. of India, Sh. Kailash Ji Choudhary.
4th January, 2022	CSWRI. Tonk	Kisan Mela 2022	Hon'ble State Minister of Agriculture, Ministry of Agriculture & Farmer welfare, Govt. of India, Sh. Kailash Ji Choudhary.
17th March, 2023	AFRI, Jodhpur	Kisan Mela 2023	Dr. M.R. Baloch. IFS, Director, AFRI, Jodhpur
24th January to 04th February 2024	Rawan ka Chabutra, Jodhpur	Western Rajasthan Industrial Handicraft Festival-2024	Hon'ble Chief Minister, Govt. of Rajasthan Sh. Bhajan Lal Sharma
24th February, 2024	AU, Jodhpur	Eat Right Millets Mela	Professor Mahendra Singh Rathore

GRAM 2017 at Udaipur

Kisan Mela 2019 at CAZRI, Jodhpur

Kisan Mela 2021 at SKNAU, Jobner

Western Rajasthan Industrial Handicraft Festival-2024

Eat Right Millets Mela

4.3.8 Awareness Programmes for Lumpy Skin Disease

In the year 2022 livestock sector of Rajasthan faced tremendous loss due to outbreak of Lumpy Skin Disease. Lumpy skin disease (LSD) is an infectious disease in cattle caused by a virus of the family Poxviridae, also known as Neethling virus. The disease is characterized by large fever, enlarged superficial lymph nodes and multiple nodules on the skin and mucous membranes (including those of the respiratory and gastrointestinal tracts).

DEE played a proactive role through its KVKs to create the awareness among farmers to prevent the spread and check the losses due to LSD. Around 50 Awareness Programmes have been conducted to create awareness for the Lumpy Skin Disease by KVKs. In these programs around 4000 animal keepers participated and learn management of lumpy disease. Ayurvedic medicines were also distributed to the farmers in these camps.

4.4 KVKs of Agriculture University

4.4.1 Staff Position and details of existing KVKs

Table 4.6: Establishment year, details of land and status of staff

S. No.	Name of District	Name of KVK	Year of Start	Land(ha)	Staff position
1.	Jalor	KVK Keshwana	1985	62	11
2.	Sirohi	KVK Sirohi	1989	31	11
3.	Nagaur	KVK Athiyasan	1992	20	10
4.	Nagaur	KVK Maulasar	2012	20	13
5.	Jodhpur	KVK Phalodi	2012	20	12
6.	Barmer	KVK Gudamalani	2012	20	9
7.	Pali /Beawar	KVK Raipur	2022	20	7
8.	Jalore/Sanchore	KVK Bamanwara	2022	16	6

4.4.2 Krishi Vigyan Kendra, Sirohi

It is an extension-based grass root level institute established on 1989 by the ICAR to promote latest technical knowledge in agriculture and allied fields. KVK is situated 8 kms away from District Headquarter on National Highway 62 towards Pali. This KVK has received "The Best KVK Award 2012" for its outstanding contribution in Extension Education services.

Poultry Unit: As the part of district consist of tribal communities and other than farming their major occupation is poultry farming, KVK Sirohi established a poultry unit. In this unit major poultry breed suitable for the climatic conditions of Rajasthan and essential for rural poultry are being kept like Pratapdhan (50 birds). These breeds are provided to farmers for breeding purpose to raise their income by enhancing the egg production.

KVK Sirohi Adm. Building


Nursury of KVK Sirohi

Plant Health Clinic: Plant health clinic is established at this KVK under NHM for diagnosis of plant samples to provide remedial measures to farmers.

Nursery Unit: Established to make the farmers available quality planting material for fruit and Vegetable production at their own farm. Every year around 1 lakh plant saplings of Papaya, chilli, drumstick, lemon, etc are raised for selling purpose to generate about 12-15 lakhs rupees.

Goat Unit: Looking into the importance of Sirohi breed for Rajasthan this unit was established for breeding purpose. At present more than 100 goats are there at unit. Every year this unit marks the sell of 15-20 bucks for breeding purpose and earns around 2 lakh rupees as revenue.

Azolla Unit: To make up the nutrient deficiency in animals especially in small ruminants this unit was established. This unit acts as fodder source for institutes goat unit as well as for demonstration for farmers. Every year KVK sells more than 100 kg Azolla.

Major revolution brought by KVK Sirohi

- Survey indicated that implementation of mandatory activities of KVK have increased income of various group of farmers by 25-30 per cent. Establishment of different modules of IFS like protected cultivation structures, use of improved and new varieties of crops, dairy units, NADEP and vemi-composting units, *Azolla* and Napier grass units are common at the Sirohi farmers' fields now days. Oil seeds, especially castor cultivation was promoted and there are many farmers which are harvesting more than 60 q/ha bean yield from irrigated castor which is highest in Rajasthan.
- KVK, Sirohi has promoted pomoculture extensively. By producing and selling papaya saplings of variety Red lady-786 and Arka Surya and disseminating mechanical inter-culture techniques developed through OFT, papaya cultivation has spread in the area to good extent. Similarly, the institute has promoted pomegranate, lime, custard apple, sapota and ber cultivation by extension activities. The technique of renovation of old lime orchard is very famous amongst farmers. Through its Nursery more than 1.78 lakhs saplings of latest varieties and hybrids of tomato, cauliflower, drumstick, chilli were sold to the farmers.
- Sirohi is the aspiration district of the state and major part of the district comprises tribal region. To uplift the livelihood status of farmers, KVK done tremendous work through its various intervention. In these interventions improvement of local goat breed was the first priority and it was done by providing Sirohi buck to tribal farmers.

4.4.3 Krishi Vigyan Kendra, Keshwana, Jalore

It is functioning since July, 1985. This KVK is enriched with all basic facilities like building, farmer's hostels, demonstration units, soil testing lab, plant health clinic with 62 hectares instructional farm. The KVK is contributing the technology for pomegranate production in the region.

KVK Keshwana Campus

Plant Health Clinic: Plant health clinic is established at this KVK under NHM for diagnosis of plant samples to provide remedial measures to farmers.

Goat Unit: For promotion of Sirohi goat in this region, the goat unit was established. This unit work for the breed improvement in local goat breeds of the district. 22 goats are there in this unit.

Poultry Unit: Pratapdhan poultry breed is available at this Unit and provided to farmers to increase their income through high egg production quality of the breed.

Azolla Unit: For the demonstration purpose *Azolla* and NADP compost units were established. Along with their utility as demonstration unit during various on campus training programmes, this unit also contributes to revolving fund of the KVK.

Fruit Orchard: The centre has custard apple, guava, mango, sapota and fig demonstration units with all recommended varieties of these fruits.

Major revolution brought by KVK

- Since 1996, KVK, Jalore is known for quality seed production and it is the pioneer KVK in seed production. In *Kharif* seasons, KVK is producing seeds of mung bean, cluster bean, sesame and in Rabi mustard, cumin, isabgol and chickpea.
- Under diversification of farming system popularization of pomegranate cultivation resulted in sharp increase in the area under this crop. Similarly, cultivation of *Chinopodium quinova, Amranthus hypocondriacus* were introduced by KVK, Jalore amongst the farming community. District's first pprocessing unit of *quinova* was setup by farmers under the technical guidance of KVK Scientists.

- Popularization of organic farming practices resulted in sharp increase in the area under organic farming in Jalore. Crop management practices to improve saline-alkali soil & water condition also contributed a lot towards income enhancement of the Jalore farmers.

4.4.4 Krishi Vigyan Kendra, Athiyasan, Nagaur-I

It was established in the September 1992. This KVK is situated at Village Athiyasan, 7 kms away from Nagaur city on Ajmer Road and linked with National Highway 89. The KVK is having seed hub of pulses granted by ICAR New Delhi.

Seed Hub: This is one of a kind functional unit of KVK. To promote the pulse production ICAR has established here. This seed hub is running with the aim to provide quality seeds of pulses to farmers. Through farmer-participatory mode and seed production at KVK farm, every year 250-300 quintal seed is produced particularly mungbean and generate revenue 10-15 lakhs.

Nursery Unit: Established to make the farmers available quality planting material for fruit and Vegetable production at their own farm. Every year around 15-20 thousand plant saplings of Papaya, tomato, drumstick, ber etc are raised for selling purpose to generate about 1 lakh rupees.

Goat Unit: Nagaur is having the remarkable place when it comes to goatry. To showcase the farmers how the breed impact the overall economics of the goat farming this unit was established. With 33 goats this unit is functional and generating 50 thousand rupees every year.

Poultry Unit: The Centre is maintaining kadaknath breed of poultry in its purest form and earning good amount for the Revolving fund.

***Azolla* Unit:** To fulfill the feed requirement of the institute's Goat unit and to serve as a demo unit for the farmers, this unit was established.

***Aloe vera* Unit:** The issue of high demand and not enough availability of medicinal plants ended with establishment of this one-of-a-kind unit at KVK. Various products made up of *Aloe vera* are being prepared using the plants grown at this unit.

Major revolution brought by KVK

- The major revolution brought out by this KVK is the production of quality seed of pulses. This programme really worked out in promoting the pulse production in Nagaur district. The year 2022 marked 229.8 quintal quality seed of mungbean.

Sirohi Goat Unit at KVK Athiyasan Naguar-I Unit

KVK Athiyasan Naguar Adm. Building

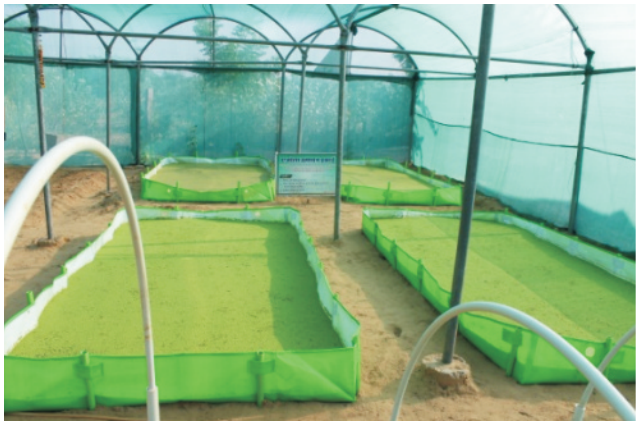
- The cultivation practices of Nagauri methi were disseminated to the farmers through training resulting improvement in quality and productivity of Nagauri methi. Good marketing practices were provided and adopted by farmers which ultimately lead to high market price of Nagauri methi. KVK is selling value added Nagauri methi and pickles (kachari and mix). The sell gone upto 400 kg and generated revenue more than 50 thousand.

4.4.5 Krishi Vigyan Kendra, Phalodi, Jodhpur II

It was established on April 12, 2012 as KVK Jodhpur-II under jurisdiction of Agriculture University, Jodhpur. It is located in Phalodi Tehsil of Jodhpur District on Mohra village road. This KVK is doing excellent work in transfer of technologies in the region.

Nursery Unit: Established at this Krishi Vigyan Kendra for selling of fruit and Vegetable saplings to farmers. Mainly vegetable saplings are grown and sell to farmers. This encouraged farmer to have vegetable production as extra source of income.

Poultry unit & Azolla Unit: Established at this Krishi Vigyan Kendra for promotion of pratapdhan breed of poultry and azolla for milking animal. In spite of this, the center has established ber, lime, Fig and *tharshobha* khejri units at its demonstration block.



Azolla Unit at KVK Phalodi

KVK Phalodi Administrative Building

Major revolution brought by KVK:

- Chickpea variety GNG-1581, Gangaur was introduced for first time during 2016-17 in Villages: Padasala and Bendo ka bera of Lohawat block of Jodhpur District. At present horizontal spread of this variety in about 400 ha.
- *Kharif* Onion was promoted due to low cost of cultivation, less irrigation requirement and high market price of bulbs during the winter season. The cultivation of *Kharif* onion has a horizontal spread of 100 ha in Phalodi and Lohawat blocks of the districts.

4.4.6 Krishi Vigyan Kendra, Gudamalani, Barmer-II

This KVK established in 2012 by ICAR, New Delhi at Gudamalani in Barmer district of Rajasthan for speedy transfer of technology to the farmers' fields of arid areas. The KVK is doing best in soil and water testing and have excellent technologies on pomegranate production.

KVK Gudamalani Adm. Building

ARYA : In this KVK one unique feature is ongoing ARYA (Attracting and Retaining Youth In Agriculture) project. This project was launched in 2020 in Barmer. This project is designed to provide training on five specific areas: goat rearing, poultry farming, nursery management, value addition and Paravet & AI. In last three years 21 programmes were conducted and more than 300 youth participants were trained. 31 entrepreneurs have established their own units and earn 5-6 lakhs rupees per annum.

Goat unit: Established at this Krishi Vigyan Kendra for promotion of Sirohi breed. Currently 55 goats are present the unit in a very healthy condition. Every year 17-18 goats are sold for breed improvement purpose and more than 1 lakh rupees is contributed by this unit.

Soil water Testing laboratory: This Unit was established in 2019 with the purpose to provide soil quality data to farmers of Barmer. This lab was proved a milestone for this region as the soil testing values encouraged farmers to improve the quality of soil. In this lab more than 1000 soil samples from farmer's field are being tested. The lab generates revenue around 1.5-2 lakhs.

***Azolla* Unit:** To make up the nutrient deficiency in animals especially in small ruminants this unit was established. This unit acts as fodder source for institutes' goat unit as well as for demonstration for farmers. Every year KVK sells more than 200 kg Azolla and more than 30 thousand rupees revenue is generated.

Sheep Unit: This is State's first sheep unit for sell purpose. A Sheep Unit is established in 2022 at this KVK. In this unit *Avishan* breed of Sheep is kept for promotion of sheep rearing in the area. 20 sheep are there at this unit.

Nursery Unit: Established at this Krishi Vigyan Kendra for selling of fruit and Vegetable saplings to farmers. In fruit plants planting martial for fig (Variety Dyna) and among vegetables tomato, chill and brinjal are available. Till now more than 40 thousand plant saplings have been sold.

Poultry Unit: Both the major breeds of this region Pratapdhan and Kadaknath are reared at this unit. This unit is also having incubator. These poultry birds are provided to farmers for breed improvement purpose. More than 100 birds are there. Every year more than 1 lakh rupees are earned by selling eggs and chicks.

Value Addition Lab: A value Addition Lab is established at this KVK for preservation and value addition established in 2022. In this lab Bajra Biscuits, Bajra cake, Bajra Namkeen, Bajra Puff and other Bajra products are prepared for selling and also doing skill upgradation through training. This lab contributes 1 lakh rupees revenue through production of 1 quintal value added products especially made up of bajra.

Value addition lab at KVK, Gudamalani

Avishan breed of sheep unit at KVK, Gudamlani

Dal Mill: At this KVK Dal Mill Unit is established in 2022 for promotion of Dal making. The purpose of establishment was to provide processing facilities to small and marginal farmers.

Dal Mill

Major revolution brought by KVK

- The Gum production technique of CAZRI, Jodhpur through injecting Ethephon in the stem of local Kummat tree (*Acacia senegal*) was also proven beneficial practices. During reporting period, a total 13,675 demonstration recorded average yield 552.1 Kg gum per ha which was five to ten time higher over un-injected tree. This practice is now adopted by many farmers.
- KVK has introduced Pomegranate, Date palm, Fig and Gonda in arid environment with limited irrigation. Gradually Pomegranate, Fig and Date palm has spread in all areas of Barmer District and nearby district. The return of some farmers is up to 3-4 crore per year from these horticultural crops. KVK is continuously monitoring and solving the problems these crops standing in farmers' fields.

- KVK, Gudamalani is also providing technical support to 600 *WADIs* set up with the financial support of CAIRN Energy, Barmer under Barmer Unnati project to strengthen the livelihood of the farmers. There are 600 WADIs presently existing at farmers' fields in Barmer district. One hundred fruit plants (pomegranate, ber and lasoda) had been given free of cost by the CAIRN Energy, Barmer. All support to raise the *WADI* was given by company and these *WADIs* are flourished under the technical support of KVK Gudamalani. Farmers are earnings 35000-40000 per WADI annually.

4.4.7 Krishi Vigyan Kendra, Maulasar, Nagaur-II

The KVK, Maulasar (Nagaur-II) was established on 2012 at village Maulasar which is 120 km away from district head quarter on Dhankoli-Dabda road with the acquisition of 20.0 ha land.

KVK Maulasar, Nagaur-II Adm. Building

Sojat Goat unit at KVK Maulasar

Nursery Unit: Established at this Krishi Vigyan Kendra for selling of fruit and Vegetable saplings to farmers. At the KVK mostly vegetable saplings are being sold.

Poultry Unit: Kadaknath poultry reared at this unit. Poultry birds are provided to farmers for breed improvement purpose. More than 25 birds are reared.

Sojat Goat: Established at this Krishi Vigyan Kendra for promotion of Sojat breed which is famous for pinkish tinch in her ears with white colour and beautiful appearance and high market price. Currently 20 goats are present the unit in a very healthy condition.

***Azolla* Unit:** To make up the nutrient deficiency in animals especially in small ruminants this unit was established. This unit act as fodder source for institutes goat unit as well as for demonstration for farmers. Every year KVK sells more than 100 kg Azolla and more than 10 thousand rupees revenue is generated.

Major revolution brought by KVK

- KVK, Maulasar, Nagaur-II obtained the highest Seed Production (greengram, clusterbean & sesame) 109.5 q during *Kharif*, 2019 by using improved new varieties and other technologies from its Instructional Farm during this period.
- KVK Nagaur-II has demonstrated a total of 425 cluster frontline demonstrations under pulses (greengram, mothbean & chickpea) and 1000 demonstrations under oilseeds (groundnut, sesame & mustard) during 2018-19 and 2021-22 resulting in improvement of 15-30% in average yield and 10% area of demonstrated crop.
- FLD on *Kharif* onion variety Agrifound Dark Red (3.0 and 1.0 ha in 2018-19 and 2019-20, respectively) helped in the dissemination of technology in and around the villages of Bedwa covering more than 100 ha of land under *kharif* onion where earlier farmers used to grow only *rabi* onion. The spread of variety (AFDR) from farmer to farmer has gained momentum annually.

- Since last three years 150 nutri-garden demonstrations have been established by KVK to combat nutritional food security of the farm families of adjoining villages of KVK including Bedwa, Ladariya, Dabda and Maulasar. The spread of this technology through trainings, demonstrations, extension literature has helped to improve the nutritional literacy of the farm women.

4.4.8 Krishi Vigyan Kendra, Raipur, Pali- II

KVK Raipur was established on 19.01.2022 with the help of ICAR, New Delhi. At present it is running in rental building and has land of 20 ha. by state govt. The civil work of administrative building and farmer hostel is almost Completed.

KVK Raipur, Pali-II Adm. Building

4.4.9 Krishi Vigyan Kendra, Bamanwara, Jalore- II

KVK Bamanwara established on 15.01.2022 with the help of ICAR, New Delhi. At present it is running in rental building and has the total land of 16 ha. by state govt. The civil work of administrative building and farmer hostel is almost Completed.

KVK Bamanwara, Jalore II Adm. Building

4.4.10 Technical Performance

4.4.10.1 Training Achievements

Training for farmers are extension programs and activities designed to enhance the knowledge, skills, and capabilities of individuals engaged in farming. These training initiatives aim to improve agricultural practices, increase crop yields, raise livestock more efficiently, and promote sustainable and environmentally friendly farming methods.

On Campus Trainings: KVKs organized courses for knowledge empowerment and skill development of farming community. Farmers were trained on aspects of integrated farming system, integrated crop management on different crops, lay out of orchard, nursery management, goat rearing during last 10 years including 1513 on campus courses of 1-4 days duration, benefiting 41612 participants (Table 4.7).

Off Campus Trainings: KVKs organized total 1666 awareness development off campus training on different aspects i.e. Integrated farming system, integrated Crop management on different crops, lay out of orchard, nursery management, goat rearing etc. under above training programme. A total of 54636 farmers and farm women were benefited (Table 4.7).

Sponsored Trainings: As a knowledge and resource centre of the district, different line departments and NGOs have approached the center for training programmes. The Kendra organized 527 sponsored training programme, benefiting 19970 farmers/farm women and rural youths. These trainings were proven helpful in spreading technologies in the villages not adopted by KVK. These trainings were multi-disciplinary and farmers were trained on various aspects of agricultural sciences.

Table 4.7: On Campus, Off Camus and Sponsored Agencies Training organized for farmers by KVKs

S.No.	KVK	On Campus Training		Off Campus Training		Sponsored Training	
		No.	Participants	No.	Participants	No.	Participants
1.	Jalore I	235	7632	349	7889	85	3323
2.	Sirohi	448	13392	244	6623	321	11446
3.	Nagaur I	132	3547	257	6362	51	2021
4.	Nagaur II	147	3598	211	5774	30	1662
5.	Jodhpur II	82	2400	130	3393	69	2271
6.	Barmer II	287	6155	820	32359	54	2500
7.	Jalore II	04	124	03	101	1	100
8.	Pali II	10	282	4	77	6	180
Total		**1,513**	**41,612**	**1,666**	**54,636**	**527**	**19,970**

4.4.11 Frontline Demonstrations

Front Line Demonstration (FLD) is an agricultural extension program or initiative aimed at showcasing and promoting improved agricultural practices, technologies, and innovations to farmers in a practical and demonstrative manner. FLDs are typically carried out by agricultural extension personals, Agricultural Universities, research institutions, or non-governmental organizations in collaboration with farmers and other stakeholders. The primary goal of FLDs is to bridge the gap between agricultural research and farmers' fields by providing farmers with first-hand experience and evidence of the benefits of adopting new and improved agricultural techniques and technologies.

Key features of Front-Line Demonstrations include:

- **On-Farm Demonstrations:** FLDs are conducted directly on farmers' fields, allowing them to observe the results of implementing specific agricultural practices or using particular agricultural inputs.

- **Technology Transfer:** FLDs serve as a means of technology transfer from research institutions to farmers. Researchers provide guidance and support to farmers in implementing the demonstrated practices.
- **Adaptive Research:** FLDs often involve adaptive research, where researchers work closely with farmers to tailor agricultural technologies to local conditions, such as soil types, climate, and cropping patterns.
- **Data Collection:** Data on the performance of the demonstrated practices or technologies are collected rigorously. This data helps in assessing the effectiveness, economic viability, and impact of the interventions.
- **Farmers' Participation:** FLDs encourage active participation and feedback from farmers. Their input is valuable in refining and fine-tuning the technologies or practices to suit local needs and preferences.
- **Capacity Building:** FLDs provide training and capacity-building opportunities to farmers by enhancing their knowledge and skills in adopting new agricultural practices.
- **Scaling Up:** Successful FLDs often serve as models for scaling up the adoption of improved practices and technologies across a broader geographical area.
- **Decision Support:** FLDs help farmers make informed decisions about adopting new practices or technologies by providing real-world evidence of their benefits and drawbacks.

On campus training at KVK Campus

FLD of chickpea at farmers field

Front Line Demonstration programs play a crucial role in promoting sustainable and efficient farming practices, increasing agricultural productivity, and improving the livelihoods of farmers. By offering practical, on-ground experience and addressing the specific needs of farming communities, FLDs contribute to the overall development of agriculture and rural areas. Front Line Demonstration (FLD) is a unique approach to provide a direct interface. Following table presents 10 years averaged FLD data for KVKs of AU, Jodhpur:

Highest increase in green gram production over farmer practices is recorded by KVK Jodhpur- II while highest additional net return by Nagaur II (21, 983 Rs/ha). Jodhpur II also recorded highest % increase in the production of Sesamum (28.97%) while the additional net return from sesamum was by Jalore –I (9,479 Rs/ha). Jodhpur-II also witnessed the highest % increase in Groundnut production (25.06%) and Nagaur-1 secured the highest additional Net Return (23344 Rs/ha). The major crop of the region Pearl millet recorded highest % increase by Barmer- II and additional net return by Nagaur-I (5862 Rs/ha).

Table 4.8: Details of Frontline Demonstration data (10 years average) of Kharif Crops

KVK	Crop/Variety	Seed yield (q/ha)		Per cent increase over FP	Net Return (Rs/ha)		Add. Net Return over FP (Rs./ha)
		Farmer' spractice	Improved Practice		Farmer's practice	Improved Practice	
Green gram							
Sirohi	SML-668/ G-4/ GM-4/GAM-5/ GM-6/ IPM-410-3	5.39	5.83	31.3	15940	24431.29	8490.57
Jalore I	IPM 02-03/ GM 6 and GM 7	4.8	6.6	37.5	9973	25377	15404
Nagaur I	SML-668/GM-4/5/6/ IPM 2-14	6.56	8.27	25.92	28077	39928	11851
Nagaur II	SML-668/GM-4/IPM 2-03	13.44	15.92	18.45	25869	38886	21983
Barmer II	GM-4/IPM 2-14	5.23	6.38	24.17	15546	25987	8274
Jodhpur II	GM-4/ GAM-5	5.62	7.18	27.82	20853	29476	8623
Pali-II	GM-7	10.2	12.6	23.53	46450	61625	15175
Sesamum							
Sirohi	RT-346/GT-3/RT-351	3.29	4.25	28.22	11908	18819	6911
Jalore I	RT-351	4.1	5.71	28.32	13337	22817	9479
Nagaur I	RT-346/351	3.90	5.00	28.42	14296	20960	6664
Barmer II	RT-351	3.86	4.96	17.17	8667	20343	8891
Jodhpur II	RT-351	3.74	4.82	28.97	16677	24200	7524
Groundnut							
Nagaur I	HNG-69, HNG-123/ GJG-19	21.53	26.41	22.63	80320	103665	23344
Barmer II	GJG-19	19.45	23.48	20.55	60038	79467	8482
Jodhpur II	HNG-143, GJG-19	20.68	25.86	25.06	58483	77069	18586
Pearl millet							
Nagaur I	RHB-177/ MPMH-17/HHB-299	13.87	16.86	21.81	15362	21225	5862
Barmer II	MPMH-17	7.48	10.26	32.32	6112	12826	5446
Jodhpur II	MPMH-17, HHB-299	14.26	17.08	19.80	16245	20745	4500
Pali-II	MPMH-17	13.3	14.75	10.90	21935	27131	5196
Castor							
Sirohi	Raj-4037/RJ-4120/Raj-4238/ DBW-187	31.9	40.58	26.75	38894	52943	14149
Maize							
Sirohi	DKC-7074/JKMH-502/ DHM-121	22.91	31.13	33.44	23902	34988	11085

Table 4.9: Details of Frontline Demonstration data (10 years average) of Rabi crops

KVK	Crop/Variety	Seed yield (q/ha)		Per cent increase over FP	Net Return (Rs/ha)		Add. Net Return over FP (Rs./ha)
		Farmer' spractice	Improved Practice		Farmer's practice	Improved Practice	
Chick pea							
Sirohi	RSG-896/GNG-1581/ RSG-924/GNG-2144	13.48	17.69	30.43	42470	58944	16477
Jalore I	RSG974/GNG 1958/ GNG-2144	11.43	16.11	29.05	35077	53525	18448
Nagaur I	GNG-1581/2144/1958 & RSG-974/	13.93	17.32	24.25	41381	58306	16924
Nagaur II	GNG-1581	12.00	14.61	21.75	24560	39080	14520
Barmer II	GNG-2144	7.95	10.07	26.62	14647	26941	9959
Jodhpur II	GNG-1581, GNG-1958	16.07	20.42	27.09	52276	71156	18880
Mustard							
Sirohi	PM 26 /RGN 229/NRCHB101/ Giriraj/RH-0749	15.21	18.99	25.36	44654	59495	14622
Jalore I	PM-26/ Giriraj / Radhika	13.83	19.60	29.43	42148	65688	23540
Nagaur I	Lakshmi/ NRCDR-2/ PM-26	16.21	19.30	20.43	38779	50766	11987
Nagaur II	Lakshmi/ NRCDR-2/ PM-26	14.0	19.0	35.74	26500	34925	8425
Barmer II	NRCDR-2/ PM-26	13.86	17.74	28.86	40207	59909	16425
Jodhpur II	PM-26, DRMRIJ-31, RH-0749	14.97	19.52	30.44	46195	64417	18222
Pali-II	PM-30/ RADHIKA	16.05	18.1	12.79	52180	62445	10265
Cumin							
Sirohi	GC-4	4.65	6.42	40.59	42037	69946	27909
Jalore I	GC-4	6.75	8.78	23.12	60950	94500	33550
Nagaur I	GC-4	6.76	8.75	28.98	83744	117007	33262
Nagaur II	GC-4	3.00	3.90	30.00	28800	31200	2400
Barmer II	GC-4	4.94	6.29	29.78	50667	76841	23475
Jodhpur II	GC-4	5.71	7.41	29.76	68905	94470	25565
Pali-II	GC-4	5.64	6.27	11.17	130555	148125	17570
Isabgol							
Nagaur I	RI-1	10.10	12.54	24.17	57592	77256	19663
Nagaur II	RI-1	7.25	9.04	24.68	72844	94882	22038
Barmer II	RI-1	8.10	9.93	23.12	28407	48816	20408

Highest increase in chick pea production over farmer practices is recorded by KVK Sirohi (30.43%) while highest additional net return by Jodhpur II (18,880 Rs/ha). KVK Nagaur II recorded highest % increase in the production of Mustard (35.74%) while the additional net return from Mustard was by KVK Jalore–I (23,540 Rs/ha). Sirohi witnessed the highest % increase in Cumin production (40.59%) and Jalore-I secured the highest additional Net Return (33,550 Rs/ha). Isabgol recorded highest % increase at Nagaur II (24.68%) and also the additional net return (22038 Rs/ha).

FLD of peanut organised by KVK, Maulasar

MPMH 17 hybrid of pearl millet in FLD

4.4.12 Extension Activity

For rapid transfer of proven technologies, various extension activities like field days, agricultural exhibition, farmers fairs, radio talk, TV show, film show, extension training meeting, kisan Gosthees, farmers scientists interaction, exhibition ex-trainees meetings etc. were being organized regularly by the KVKs. During last ten years, 446 field days (1,233), 132 agricultural exhibitions (8,833), 679 film shows (5,621) and 145 farmer - scientist interactions (2,026) were organized to motivate farmers for adoption of new technologies.

Table 4.10: Details of Extension Activities performed by KVKs

Year	Field Days	Exhibitions	Advisory Services	Film Shows	DiagnosticVisits	Farmer Scientist Interactions
Jalore I	82	21	930	150	42	25
Sirohi	87	20	3,138	79	209	15
Nagaur I	72	34	19822	129	104	17
Nagaur II	89	22	923	117	28	16
Jodhpur II	56	15	9412	147	104	16
Gudamalani	56	16	74760	51	460	42
Pali II	3	4	23	6	8	4
Jalor II	01	0	2500	0	40	10
Total	**446**	**132**	**111,508**	**679**	**995**	**145**


Woman Kisan Gosthee organised by KVK scientists at Farmers Fields

Publications: All KVKs of University publishes their FLD and OFT work in form of research paper along with the publication in regional language useful for farmers covering various aspects of the areas. The publication in regional language is handy and is distributed to farmers on various occasions like Kisan mela/Kisan gosthee/ trainings etc.

Table 4.11: Details of research publication and publications for farming community

KVKs	PopularArticles	Research Papers	Pamphlets	Leaflets
Jalore I	21	05	34	30
Sirohi	16	13	23	14
Nagaur I	39	22	60	12
Nagaur II	72	27	70	73
Jodhpur II	35	15	06	36
Gudamalani	26	21	118	22
Pali II	-	-	4	1
Jalor II	-	4	5	1
Total	**209**	**107**	**320**	**189**

4.4.13 Seed Production at KVKS Farm

A Seed Production Program at Krishi Vigyan Kendra (KVK) is an initiative aimed at enhancing the availability of high-quality seeds of improved crop varieties among farmers. Seed production programs at KVKs play a crucial role in improving agricultural productivity and promoting sustainable farming practices.

Seed Production at KVKs farm

Table 4.12: Seed production Yield (q) at KVK Farms (2013-14 to 2022-23)

S.No.	Crops	KVK Jalore I	KVK Sirohi	KVK Nagaur I	KVK Nagaur II	KVK Jodhpur II	KVK Gudamalani
1.	Mustard	148.48	263.67	-	-	4.91	23.75
2.	Wheat	107.05	149.70	-	38.88	-	-
3.	Chickpea	251.44	146.21	-	17.73	0.52	-
4.	Greengram	752.91	129.79	634.75	222.73	-	2
5.	Barley	-	85.93	-	-	-	-
6.	Cumin	120.16	82.35	-	-	48.73	59.21
7.	Sesame	43.65	44.68	-	13.24	-	-
8.	Taramira	25.49	40.58	-	-	13.19	-
9.	Castor	-	32.58	-	-	-	-
10.	Clusterbean	416.54	24.18	30.38	218.77	54.40	-
11.	Sunhemp	-	7.5	-	00	-	-
12.	Blackgram	-	4.36	-	00	-	-
13.	Pearlmillet	-	2.34	-	46.30	-	2.8
14.	Mothbean	-	-	-	-	-	16.3
15.	Isabgol	61.93	-	-	34.30	-	27.31
Total		**1927.65**	**1013.87**	**665.13**	**601.95**	**121.75**	**182.85**

4.4.14 DAESI and 15 days Fertilizer Retailer Programme

Directorate of Extension Education, Agriculture University, Jodhpur also act as nodal training institute for Diploma in Agriculture Extension Services for input Dealers. This Diploma was implemented by National Institute of Agricultural Extension Management (MANAGE). The purpose of this 48-week diploma is to build technical competency in agriculture among input dealers and to facilitate them to serve the farmers better and to act as para – extension professionals. We intend to train the people from farming community for income generation. We provide 15 days training for Fertilizer retailers at each KVK.

Table 4.13: Details of DAESI and 15 days Fertilizer Retailer Programme

Name of KVK	DAESI		Fertilizer Retailer		Income (Rs in lakhs)
	Number	Participants	Number	Participants	
DEE	3	120	-	-	3.75
Jalore I	1	40	-	-	0.50
Sirohi	1	40	5	164	1.50
NagaurI	2	80	5	175	5.0
Nagaur II	3	119	2	64	1.70
Jodhpur II	2	80	3	101	3.69
Gudamalani	3	121	16	530	21.6

4.4.15 KVKs income in Revolving Fund

Revolving fund remains available to finance continuing various field and farm operations without any fiscal year limitation, because the organization replenishes the fund by repaying money used from the account. Revolving funds have been used to support overall development of KVK.

Table 4.14: Averaged revolving fund (In lakhs) of all KVKs

KVKs	Income deposited in RF (Rs)	Expenditure Incurred from RF (Rs)	Balance of RF as on 31st March including FD
Jalore I	215.5	209.72	5.78
Sirohi	119.2	105.0	14.2
NagaurI	45.0	39.87	5.13
Nagaur II	29.19	17.98	11.21
Jodhpur II	26.57	19.39	7.18
Gudamalani	69.83	46.76	23.09
Raipur	0.81	0.22	0.58

4.4.16 Agricultural Technology Information Centre (ATIC)

The project was sanctioned in 2020 under the RKVY. ATIC is functioning on single window delivery system & for meeting the requirements of the farmers in terms of new technology, seeds/planting material of improved varieties, diagnostic facility and literature which is quite innovative and would help in bringing the institutions/SAUs closer to the farmers.

Services of ATIC

- Diagnostic services for soil and water testing, plant and livestock health
- Supply research products such as seeds and other planting materials, poultry strains, livestock breeds, processed products, etc, emerging from the institution for testing and adaptation
- Sale of publications and communication materials as well as audio-visual aids produced by the research organization.

4.4.17 Soil Testing Mobile Van

Mobile Van Facilities for analysis of Soil and water samples of farmers at field level is available (Sanctioned in RKVY in 2021) under Directorate of Extension Education.

ATIC at Agriculture University Campus Mandor

Mobile Soil Testing Van of KKVK Project

4.5 Farmer FIRST Programme (FFP)

4.5.1 Project Title

Technology Integration for Doubling Farm Income through Participatory Research and Extension Approaches in Jodhpur District of Rajasthan

Location: Village- Balarwa, Binjwaria and Manai Address: Teh. Tinwari & Mandor, District: Jodhpur

No. of households: Marginal- 260, Small- 320**,** Large Farmer- 220, Landless labours- 200

Major cropping system:

Table 4.16: Income status of farmers in project area

S. No.	Cropping system	Farmers/ Farm households involved	Income at the time of Projectstart (Rs/ha/annum)
1.	Pearl millet based	300	47,000-52,000
2.	Green gram based	200	54,000-60,000
3.	vegetables based	200	90,000-1,00,000
4.	Seed spices based	180	60,000-65,000
5.	cotton wheat based	120	1,10,000-1,15,000

4.5.2 Objectives

- To provide technological interventions for enhancing income by addressing prioritized production problems for different micro farming situations and to assess their rate of adoption and impact.
- To introduce economically viable and socially acceptable agro-based entrepreneurial activities like vegetable and fruit production and post harvest management for enhancing income through strengthening backward and forward linkages.
- To build a network of linkages with different entities around the farm house holds viz., technology institutions, input support systems, market and other agencies for facilitating access of information, technology and marketability of produce for higher returns.
- To find out the technical, social-economic and environmental impact in terms of organic carbon, pH, water holding capacity of soil, soil fertility status and water quality of irrigation source in the project to develop a database.

Performance on different modules as per project guidelines issued by ICAR viz Crop based, Horticulture based, Animal based, Natural Resource Management based, IFS Enterprise based, Institutional mechanism and content mobilization:

- New varieties of crop recommended by the Agriculture Research Station, Mandor were introduced at FFP sites. MPMH-17 of pearl millets, GaM-5 of green gram, Girnar of mustard, Pusa Rudhira of carrot, ACr-1 of coriander, RAJ-4083 of wheat. This intervention resulted in increase in seed/ product yield by 18-23 per cent.
- High Walk in Tunnel for drying of mint, rose petals and chilli was found successful as this intervention provided quality drying and protection from aberrant weather.
- Rearing chilli, cabbage and other vegetables saplings in 40 mesh plastic net provided virus free seedling resulting better establishment of crop, high yield and more income.
- Demonstration of potash application in onion, phosphorus application in carrot resulted in high yield by 15-22 percent resulting more profit.

- Twenty-five improved bucks of *Sirohi* breed were introduced for breed improvement. Similarly, 50 units of Poultry: *Pratapdhan* were also introduced for earning additional income. Both these interventions became very popular amongst the farmers.
- Tree saplings of Lasoda (*Cordia myxa*), Drum stick, Aliganj Ber and grafted khejri: *Thar Shobha* were planted at borders of field at FFP sites for getting additional income from the existing system. The produce is sold to market/pharmaceutical companies.

Major changes in the existing cropping /farming system:

- Increase in area under chilli-based farming system- Due to adoption in IPM in chilli
- Inclusion of Napier in fodder-based farming system in place of fodder sorghum.
- Cucumber cultivation in protected/ shade net farming (6 poly house have been established in FFP Villages)
- Many units of backyard poultry in FFP Villages and dominance of Sirohi breed goat in the local herds can be seen.
- Due to improvement in the knowledge and behavioural attitude through scientific interaction, farmers have started IPM in different crops, utilisation of farm waste by making organic manure and adopted IFS modules for better farm income.


Drying of chilli in high walk-in tunnel


Avishan sheep breed at farmers field


Sesame variety RT 351 at Farmers field


Kisan Goshthee and Monitoring of FFP activities


Clusterbean Variety RGC 1033 at Famers field


Greengram Vareity MH 421 at Famers field

5. Prioritization, Monitoring and Evaluation

The Directorate of Prioritization, Monitoring and Evaluation is headed by Director, Prioritization, Monitoring and Evaluation (PM&E) shall have the following duties and functions:

(i) Preparation of the perspective's developments plan of the University and evaluations of existing programmes/projects of the University in consultation with the concerned officers of the University.

(ii) Preparation of all such documents as may be necessary for getting the accreditation of the University by competent bodies.

(iii) Plan for the effective utilization of all resources of the University *i.e.* man power, material and money and monitor the same.

(iv) Maintain and operate information bureau for all aspects of the University *i.e.* establishment, resources, finances, land, movable property etc.

(v) Plan and monitor adequacy of revenue and expenditure in the budget in consultation with the Comptroller.

(vi) Prepare and publish the Annual Report and University Newsletters etc.

(vii) Any other duties/functions as may be assigned by the Vice-Chancellor.

The Office of Directorate of Prioritization, Monitoring and Evaluation was set up on 18.10. 2013. The list of Directors holding the charge alongwith list of Annual Reports prepared and published by this directorate is given in Table (5.1).

Table 5.1: List of Directors, Prioritization, Monitoring and Evaluation

Name and Designation	Period		University Annual Report Publication
	From	To	Year
Dr. G. S. Rathore, Professor (Plant Pathology)	18.10.2013	04.05.2016	2014-15
Dr. S. S. Solanki, Professor (PBG)	05.05.2016	31.08.2016	2015-16
Dr. Ishwar Singh, Professor (Agronomy)	01.09.2016	03.11.2016	-
Dr. Balwant Singh Rajpurohit, Professor (PBG)	04.11.2016	29.02.2020	2016-17 to 2019-20
Dr. Ummed Singh, Professor (Agronomy)	01.03.2020	24.08.2021	2020
Dr. Ishwar Singh, Professor (Agronomy)	24.08.2021	28.06.2022	2021
Dr. Man Mohan Sundria, Professor (Entomology)	29.06.2022	21.08.2023	2022
Dr. J. R. Verma, Professor (Plant Pathology)	22.08.2023	14.01.2024	2023
Dr. Ramdev Sutaliya, Professor (Agronomy)	15.01.2024	Continue	-

6. Human Resource Development

6.1 Directorate of Human Resource Development

Directorate of Human Resource Development is headed by Director, Human Resource Development (HRD) and performs the functions provided under section 29 (4), the Director HRD shall have the following functions:

i. Organizing and conducting induction training programme (orientation programme) for newly appointed teachers in the University and refresher courses for in-service teachers/scientists.

ii. Organizing advance training courses in frontier areas of agriculture, research management, educational technology, professional and curriculum development etc.

iii. Commercialization of innovation and technologies through organized Intellectual Propriety Right and knowledge sharing system.

iv. Organizing group discussion, seminars and workshops on areas of topical interest in agricultural research and education system.

v. Assessment studies in areas pertaining to productivity of faculty, their training needs etc. and develop data bank of human resources in the University.

vi. Director HRD shall perform such other duties and functions as may be entrusted to him by the Vice-Chancellor.

The Directors HRD holding the charge is listed below in the Table 6.1.

Table 6.1: List of Directors Human Resource Development

S.No.	Name	Period
1	Dr. S. S. Solanki	19.10.2013 to 31.08.2016
2	Dr. Ishwar Singh	01.09.2016 to 22.11.2017
3	Dr. V. S. Jaitawat	23.11.2017 to 24.06.2022
4	Dr. J. R. Verma	25.06.2022 to 12.09.2023
5	Dr. S. D. Ratnoo	13.09.2023 to Continue

6.1.1 Orientation programme conducted

The Directorate of Human Resource Development conducted four Orientation Courses for newly recruited faculties of the University in which 125 faculty members were given orientation training under NAHEP and self finance. Similarly four orientation programmes on Financial and Administrative Training Programme for Non teaching Staff of Agriculture University, Jodhpur were organized under the National Agricultural Higher Education Project (NAHEP) and self finance in which 104 Non-teaching staff members were given training (Table 6.2).

Table 6.2: List of training programmes organized under HRD

S. No.	Name of Training Programme	Duration	Date	No. of participants
	Teaching Staff			
1.	Orientation course on "Agricultural Education, Research and Extension Management"	21	11 June to 01 July, 2018	31
2.	Orientation course on "Agricultural Education, Research and Extension Management"	21	25 Aug., to 14 Sept., 2018	29
3.	An Orientation programme for newly recruited faculties (SMS) in Agriculture University, Jodhpur	21	2 to 22 January, 2023	35
4.	An Orientation programme for newly recruited faculties (SMS) in Agriculture University, Jodhpur	21	30 January to 19 February, 2023	30
	Non-teaching Staff			
1.	"Financial and administrative training programme for Non teaching Staff of Agriculture University, Jodhpur" under the National Agricultural Higher Education Project (NAHEP) by the Agriculture University Jodhpur with Collaboration of ICAR-National Academy of Agricultural Research Management, Hyderabad.	07	25 June to 2 July, 2019	18
2.	"Competency Enhancement of Non-Teaching Staff in the field of Financial and Administrative Management" held at HCM, RIPA, Jodhpur.	12	19 to 30 Aug. , 2019	30
3.	An Orientation programme for newly recruited non-teaching staff of Agriculture University, Jodhpur	06	18 March to 23 March, 2024	32
4.	An Orientation programme for newly recruited non-teaching staff of Agriculture University, Jodhpur	06	3 April to 9 April, 2024	24

7. Student's Welfare

7.1 Directorate of Student Welfare

The activities of the students in all constituent colleges are being planned and monitored by Directorate of Students Welfare headed by the Director Students Welfare. The Director Students Welfare shall be responsible to maintain general discipline among the students in the University and shall have the following duties:

1. To exercise general control and supervision on the physical education programme and other co-curricular activities of the students.
2. To conduct student elections as per the directions received from the University.
3. To assist in the placement of students of the University and arrange campus interviews.
4. To take all such steps as he/she thinks necessary to curb the menace of ragging on the campuses.
5. To arrange programme of student counseling.
6. To communicate the guardian of students concerning their welfare.
7. To make arrangements for scholarships, stipends and such other financial assistance to the students.
8. To take all steps as he/she thinks necessary to maintain peace and harmony among the students.
9. To take all such steps as may be necessary for better information exchange among the campuses regarding student affairs.
10. To make arrangements for the housing and mess of students.
11. To obtain travel facilities for holidays, study tours of students, etc.

7.1.1 Aims and Objectives

- Directorate of Students' Welfare, aims to plan and organize the co-curricular activities for the students at the University and College level.
- To coordinate different activities of Sports, Literary, Cultural, Moral Education, Placement & Counselling etc. to facilitate the overall personality development and to inculcate the basic values amongst the young students of the University to groom them as a good citizen of the Nation.
- To supervise the Students' Union activities to allow them to work in a democratic setup, to solve the genuine problems of the students and to bridge the gap between the students and College/University administration. The list of Directors of Students Welfare is given in Table 7.1.

Table 7.1: List of Directors of Students Welfare

S.No.	Name	Period
1.	Dr. R. S. Chawra	18.10.2013 to 31.3.2014
2.	Dr. M. S. Chandawat	31.3.2014 to 30.4.2016
3.	Dr. B. S. Rathore	30.4.2016 to 31.7.2017
4.	Dr. G. R. Kherwa	31.7.2017 to 30.12.2017
5.	Dr. Ishwar Singh	30.12.2017 to 6.9.2019
6.	Dr. V. S. Jaitawat	7.9.2019 to 14.1.2024
7.	Dr. J. R. Verma	15.1.2024 to Continue

7.2 Games & Sports

7.2.1 University Sports Board

University Sports Board is acting as an instrumental source in catering the needs of regular games and sports activities for the students of all the colleges. The Board has identified different games and sports for boys and girls and developed the infrastructural facilities in the university campus.

7.2.2 Annual Inter-Collegiate-Tournaments

University Sports Board has organized six Annual Inter-Collegiate-Tournaments at different campuses as per details given in Table 7.2.

Table 7.2: Annual Inter-Collegiate-Tournaments of the University

S.No.	Year	Name of organizing College	Participant College	No. of Students participated
1.	2014-15	COA, Jodhpur	COA, Jodhpur	16
			COA, Sumerpur	16
2.	2016-17	COA, Jodhpur	COA, Jodhpur	32
			COA, Sumerpur	28
3.	2017-18	COA, Sumerpur	COA, Jodhpur	48
			COA, Sumerpur	44
4.	2019-20	COA, Sumerpur	COA, Jodhpur	60
			COA, Sumerpur	54
			COA, Nagaur	51
5.	2022 -23	COA, Nagaur	COA, Jodhpur	60
			COA, Sumerpur	48
			COA, Nagaur	58
			COA, Baytu	46
			CDFT, Jodhpur	46
			CTAE, Jodhpur	35
6.	2023 -24	COA, Jodhpur	COA, Jodhpur	50
			COA, Sumerpur	50
			COA, Nagaur	50
			COA, Baytu	49
			CDFT, Jodhpur	45
			CTAE, Jodhpur	40
			Faculty of Management, Jodhpur	5

Glimpses of the Annual Inter-Collagiate-Tournaments




7.2.3 Selection Trials and Coaching Camps

Besides, organizing Iner College Tournaments, the Directorate also conducted selection trials to select the players for participating in All India Inter-Agricultural Universities Sports and Games Meet.

7.2.4 Participation in All India Sports and Games Meet

The students of the University also participated in All India Inter-Agricultural Universities Sports and Games Meet in various games and sports events as per the list given in Table 7.3.

Table 7.3: Details of students participated in All India Inter-Agricultural Universities Sports and Games Meet

S.No.	Year	Date	No. of Students Participated	Organised University
1	2018-2019	Jan. 2-5, 2019	48	Punjab Agricultural University, Ludhiana (Punjab).
2	2019-2020	March 1-5, 2020	37	Sri Venkateswara Veterinary University, Tirupati (Andhra Pradesh)
3	2022-2023	Feb. 20-24, 2023	40	CCS Haryana Agricultural University, Hisar (Haryana)


Inter-Agricultural Universities Sports and Games Meet 2019-20 at SVVU, Triputi

7.3 Literary & Cultural Activities

These activities includes Quiz, Debates, Elocutions, Arts and Crafts, Music, Folk Dance, Songs and Drama events besides other Personality Development and Professional competence. Various other professional lectures, scientific debates, discussions, exhibitions and essay writing competitions, under the literary and cultural activities which are aimed to provide a forum for drama, music, dance and singing talents among the students of this University. The Directorate has organized three Inter-Collegiate Cultural and Literacy Competition (Youth festival) at University Campus (Table 7.4).

Table 7.4: Annual Inter-Collegiate- Cultural and Literacy competition (Youth festival)

S.No.	Year	Date	Name of organizing College	Name of participant College
1	2019-20	Jan. 27-28, 2020	COA, Jodhpur	COA, Jodhpur
				COA, Sumerpur
				COA, Nagaur
2	2022 -23	Dec. 17-19, 2022	COA, Jodhpur	COA, Jodhpur
				COA, Sumerpur
				COA, Nagaur
				COA, Baytu
				CDFT, Jodhpur
				CTAE, Jodhpur
3	2023 -24	Feb. 15-16, 2024	COA, Jodhpur	COA, Jodhpur
				COA, Sumerpur
				COA, Nagaur
				COA, Baytu
				CDFT, Jodhpur
				CTAE, Jodhpur
				Faculty of Management, Jodhpur

7.3.1 AGRIUNIFEST

Selection trials and coaching camps for the selected players of University Teams for participation in All India Inter-Agricultural Universities Youth Festival (AGRIUNIFEST) were organised as per details given in Table 7.5.

Table 7.5: Details of students participated in All India Inter-Agricultural Universities Youth Festival (AGRIUNIFEST)

S.No.	Year	Date	No. of Students Participated	Organised University
1.	2018-2019	Feb. 3-7, 2019	20	SDAU, Sardar Krushinagar (Gujrat)
2.	2019-2020	Feb. 8-12, 2020	22	IGKV, Raipur (Chhattisgarh)
3.	2022-2023	March 13-17, 2023	23	University of Agriculture Science, Bangalore (Karnataka)

Glimpses of India Inter-Agricultural Universities Youth Festival

Glimpses of India Inter-Agricultural Universities Youth Festival

7.4 Students Union Activities (2014 to 2020 & 2022)

The Student Union elections are being conducted by this Directorate through Class Representative System for solving the genuine problems of the students and bridge the gap between students and College/University administration.

7.5 Student performance in National Examinations

35 students succeeded in different examinations such as ICAR- JRF and Non JRF.

7.6 Student placement

The University has well established Carrier Counseling Cum Placement Cell which is regularly giving coaching and guiding to the students for their placement in different companies/organizations/Govt Departments. Till date 71 students have been placed in different companies/organizations/Govt Departments (Table 7.6)

Table 7.6: Students Placement Profile

S.No.	Year	Company	Nos.
1.	2019	Agriculture supervisor, GoR	01
2.	2019	ITC, Barmer	01
3.	2019	National Seed Corporation	01
4.	2020	Agriculture supervisor, GoR	02
5.	2020	NHAI, Landscape supervisor	01
6.	2020	Entrepreneurship (Fertilizer/seed/pesticide Dealership)	01
7.	2021	Agriculture supervisor, GoR	02
8.	2022	Agriculture supervisor, GoR	03
9.	2022	Gujarat State Fertilizers and Chemical Limited (GSFCL) in UPL	04
10.	2022	Assistant Agriculture Officer (Government of Rajasthan)	06
11.	2022	Agriculture Supervisor Government of Rajasthan)	37
12.	2023	Karnataka Agro Sales	10
13.	2023	Ganga Organics Ltd.	02
14.	2023	ICICI Bank	05
15.	2023	Syngenta	05

7.7 Selection of students for higher studies

94 students of this University got counseling for their placement in different Institutes and Universities in higher education.

Table 7.7: Student selected for higher education

S. No.	Year	Examination	Nos.
1.	2016	SAU's	8
2.	2017	SAU's	4
3.	2018	SAU's	6
4.	2019	SAU's	8
5.	2020	SAU's/Central AU's	10
6.	2021	SAU's/Central AU's	11
7.	2022	SAU's/Central AU's	10
8.	2023	SAU's/Central AU's	37

8. Controller of Examinations

All examinations in the University are executed by Controller of Examinations as per the duties and functions conferred by the Act under Chapter-IV Section 29(8). The Controller of Examinations shall also have the following duties & functions:

(i) Fully responsible for the enrolment and migration of students, conduct of University examinations, declaration of results, issue of provisional degrees certificates, notification of merit lists, issue of merit certificates, preparation of degrees, mark sheets, award of gold medals and all other matters connected with examinations.

(ii) Act as member secretary of Result Committee, Grievance Committee and committee for preventing use of unfair means.

(iii) Responsible for maintaining records of all degrees and diplomas conferred by the University.

(iv) Responsible for the conduct of all external examinations of the University and declaration of their results.

(v) Responsible for conduct and supervision of entrance examination for admission and other examinations, if any.

(vi) Convene the meeting of the grievance committee as and when required.

(vii) Determine the equivalence of degrees of other Universities/ Certificates of Boards of other States for granting equivalence to be approved by equivalence committee.

(viii) Perform such other duties and functions as assigned by the Vice-Chancellor.

The Office of Controller of Examinations was set up on 18.10.2013. The list of Controller of Examinations holding charges is given in Table 8.1.

Table 8.1: List of the Controllers of Examinations

Name and Designation	Period	
	From	To
Dr. B. S. Rathore, Professor (Plant Pathology)	18.10.2013	21.10.2014
Dr. M. C. Bohra, Professor (Soil Science)	22.10.2014	30.09.2015
Dr. V. S. Jaitawat, Professor (Extension Education)	23.12.2015	06.09.2019
Dr. Man Mohan Sundria, Professor (Entomology)	06.09.2019	27.09.2023
Dr. U. N. Shukla, Associate Professor (Agronomy)	27.09.2023	Continue

8.1 Students Enrolled in the University

A total of 3102 students were enrolled in the University from different colleges during the period including under graduate, post graduate, MBA (ABM) and Ph.D programme (Table 8.2).

8.2 Degrees awarded by the University

A total of 968 degrees including 858 in under graduate, 104 in post graduate and 6 in Ph.D. was awarded by the University from 2016-17 to 2022-23 (Table 8.3 & 8.4). Four convocations have been organized by the University after its establishment. All issued degree have been uploaded on Digi Locker.

Table 8.2: College-wise number of students enrolled in the University under UG, M.Sc. & Ph.D. programmes

Name of College	2013-14	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total
IDA, Ladnu	22	-	-	-	-	-	-	-	-	22
CoA, Jodhpur	-	47+11*	49+12*	48+14* +4#	60+23* +6#	59+24* +6#	51+20* +06#	53+28* +09#	110+44* +13#	697
CoA, Sumerpur	-	47	49	48	59	59	51	87	101	501
CoA, Nagaur	-	46	48	46+3*	58+2*	60	112	105	102	582
MCoA, Jodhpur	-	-	-	-	-	60	58	79	49	246
CDFT, Jodhpur	-	-	-	-	-	26	14	28	23	91
CTAE, Jodhpur	-	-	-	-	-	-	30	30	30	90
CoA, Baytu	-	-	-	-	-	-	59	54	59	172
GAC, Nawa	-	-	-	-	-	-	-	59	56	115
GAC, Deedwana	-	-	-	-	-	-	-	55	55+1@	111
GAC, Osian	-	-	-	-	-	-	-	53	53	106
GAC, Barmer	-	-	-	-	-	-	-	52	51	103
GAC, Gudamalani	-	-	-	-	-	-	-	54	54	108
GAC, Jalore	-	-	-	-	-	-	-	54	54	108
SLBS, CoA, Jodhpur	-	-	-	-	-	-	-	05	28	33
Facullty of Management, Jodhpur	-	-	-	-	-	-	-	-	17	17
Total	**22**	**151**	**158**	**163**	**208**	**294**	**401**	**805**	**900**	**3102**

Note: - * means M.Sc. & # means Ph.D., @ provisional enrolment, CoA – College of Agriculture, MCoA – Mayurakshi College of Agriculture, CDFT – College of Dairy and Food Technology, CTAE – College of Technology & Agricultural Engineering, GAC - Govt. Agriculture College, SLBS CoA – Shri Lal bahadur Shastri College of Agriculture

Table 8.3: College wise degrees/diploma awarded by the University

Year	COA, Jodhpur			COA, Sumerpur	COA, Nagaur		IDA, Ladnu	Total
	UG	PG	Ph.D.	UG	UG	PG	Diploma	
2016-17	35	-	-	34	-	-	19	88
2017-18	45	11	-	40	-	-	-	96
2018-19	50	11	-	43	33	-	-	137
2019-20	54	15	-	45	48	-	-	162
2020-21	50	23	2	43	43	2	-	163
2021-22	47	24	1	46	37	-	-	155
2022-23*	56	18	3	51	58	-	-	186
Total	**337**	**102**	**6**	**302**	**219**	**2**	**19**	**987**

*To be awarded in 5th Convocation

Table 8.4: Number of UG, PG and Ph.D. degrees and gold medals awarded in various convocations

Convocation	Date	Year	UG	PG	Ph.D.	Total	UG Gold Medal	PG Gold Medal
First	4th August, 2019	2016-17	69	-	-	69	1	-
		2017-18	85	11	-	96	1	3
Second	18th January, 2021	2018-19	126	11	-	137	1	3
		2019-20	147	15	-	162	1	3
Third	15th February, 2022	2020-21	136	25	2	163	1	6
Fourth	11th March, 2023	2021-22	130	23+1*	1	155	1+1	4+1
Fifth	-	2022-23**	165	18	3	186	1+1	5+1
Total			**858**	**103-+1***	**6**	**968**	**9**	**26**

** To be awarded in 5th Convocation

First Convocation: Dated 4.08.2019

Second Convocation: Virtual Mode: Dated 18.01.2021

Third Convocation: Virtual Mode: Dated 15.02.2022

Fourth Convocation: Dated 11.03.2023

The University has received the appreciation from Raj Bhawan for successful completion of 4th Convocation Function which was done with sheer perfection.

8.3 Gold Medals Awarded by the University

Seven Gold Medals in Under Graduate (Table 8.5), 21 Gold Medals in Post Graduate (Table 8.6) and four Prof. R.P. Jangir Gold Medal in UG & PG (Table 8.7) have been awarded by the University.

Table 8.5: List of students awarded Gold Medal in Under Graduate Degree [B.Sc. (Hons.) Ag.] during 2017 to 2023

S.No.	Year	Name of Candidate
1.	2017	Mr. Ram Raj Karwasara
2.	2018	Ms. Bhavana Singh Rathore
3.	2019	Mr. Dilip Panwar
4.	2020	Ms. Srishti Paliwal
5.	2021	Mr. Dashrath Singh Chundawat
6.	2022	Ms. Parul Setia
7.	2023	Ms. Nisha Mashee*

*To be awarded in 5th Convocation

Table 8.6: List of students awarded Gold Medal in Post Graduate Degree [M.Sc. (Ag).] during 2017 to 2023

S.No.	Year	Name of Candidate	Name of Subjects
1.	2019	Mr. Hitesh Borana	M.Sc. (Ag) Agronomy
2.	2019	Ms. Priyanka	M.Sc. (Ag) Horticulture
3.	2019	Ms. Manisha Kumari	M.Sc. (Ag) GPB
4.	2020	Ms. Priyanka	M.Sc. (Ag) Agronomy
5.	2020	Mr. Manish Kumar Meena	M.Sc. (Ag) Horticulture
6.	2020	Ms. Antra Thada	M.Sc. (Ag) GPB
7.	2021	Mr. Virender	M.Sc. (Ag) Agronomy
8.	2021	Ms. Sonu Kumari	M.Sc. (Ag) Horticulture
9.	2021	Ms. Renu Rani	M.Sc. (Ag) GPB
10.	2021	Ms. Pooja Yadav	M.Sc. (Ag) Plant Pathology
11.	2021	Ms. Nisha Choudhary	M.Sc. (Ag) Entomology
12.	2021	Mr. Lokendra Singh Kishnawat	M.Sc. (Ag) Extension Education
13.	2022	Mr. Devi Lal Kikraliya	M.Sc. (Ag) Agronomy
14.	2022	Ms. Suman Poonia	M.Sc. (Ag) Horticulture
15.	2022	Ms. Sunita Sharma	M.Sc. (Ag) Plant Pathology
16.	2022	Ms. Shreya Mishra	M.Sc. (Ag) Entomology
17.	2023	Mr. Mehraj Ud Din Sofi*	M.Sc. (Ag) Agronomy
18.	2023	Ms. Nitu Nehra*	M.Sc. (Ag) Horticulture
19.	2023	Ms. Shalini Raghuwanshi*	M.Sc. (Ag) GPB
20.	2023	Ms. Pooja Kumari*	M.Sc. (Ag) Entomology
21.	2023	Ms. Payal Choudhary*	M.Sc. (Ag) Extension Education

*To be awarded in 5th Convocation

Table 8.7: List of students awarded Prof. R. P. Jangir Gold Medal during 2017 to 2023

S.No.	Year	Name of Candidate	Name of Subject
1.	2022	Ms. Parul Setia	B.Sc. (Hons.) Agriculture
2.	2023	Ms. Nisha Mashee*	B.Sc. (Hons.) Agriculture
3.	2022	Mr. Devi Lal Kikraliya	M.Sc. (Ag) Agronomy
4.	2023	Mr. Mehraj Ud Din Sofi*	M.Sc. (Ag) Agronomy

*To be awarded in 5th Convocation

9. Kisan Kaushal Vikas Kendra

This unit was established under the RKVY to provide skill oriented training to the youth/farmer in agriculture and allied fields so as to make them self employed to earn their livelihood. The objectives of KKVK are as follows:

- Enable and mobilize a large number of youth to take up skill training in agriculture and allied sciences to make them employable and earn their livelihood.
- Achieving rapid growth in the Agriculture sector through intensive skill development.
- Enhancing the economic value of time and labor of landless workforce.
- Linking the farm labor with wage related employment in Agriculture sector, during non farming months.
- Increase productivity of the existing workforce, and align skill training to the actual needs of the country.
- Helping the youth and farmer to start up their enterprise in the agriculture and allied sectors.

9.3 Special Information

9.3.1 Training

1. Capacity building programme for the Incharge/Manager/Supervisor/representative of warehouseman and secretaries of the PACCS of the warehouse registered under WDRA through online mode during 27.02.2023 to 03.03.2023. Experts included scientific staff of University, officers from WDRA, State warehouse, CCRL and NWR delivered their lecturer on various subjects closely linked with warehousing. In this programme, 40 people participated.
2. Awareness programmes for farmers, traders, millers, warehousemen/warehouse managers, assayers/graders, broadly on importance of scientific storage of agriculture produce, to safeguard the stock and availability of pledge finance against these stored stocks and Imparting knowledge to depositors/farmers in respect of provisions of W (D&R) Act, e-NWR, scientific storage practices, preservation practices, assaying procedures, stacking practices, etc. was organized on 21 November, 2022. In this programme, 100 entrepreneur participated.

3. Mushroom production Techniques for youth is designed to enable the participants to know the aspects of Mushroom cultivation and by-products of Mushroom. The objective of the training is creating awareness about the aspects of quality assessment, marketing and virtual practical experience on cultivation technology of oyster mushrooms, milky mushrooms during 19th to 25th September, 2022.
4. Capacity building programme for the officers from BAMETI, Bihar during 27.02.2023 to 03.03.2023 on Production Technology in Millet Farming and Dry Land and Rainfall based Agriculture. In this programme, 25 officers participated.

9.3.2 Seminar

The pomegranate area is continuously increasing in the state. For improving knowledge and awareness on pomegranate production and to overcome the problems presently intervened by farmers, organized two-day's seminar in collaboration with Centre of Excellence of Pomegranate, Govt. of Rajasthan during 17th to 18th March, 2023. In this Seminar, officials from Govt. of Rajasthan, Pomegranate growers from Barmer, Jodhpur, Jaisalmer, Nagaur, Jalore, Pali and Sirohi district participated. Experts from NRC on pomegranate, Solapur (MH), Agriculture University, Jodhpur, ICAR-CIAH, Bikaner and Department of Horticulture were invited to deliver lectures in two days event. In this seminar, 100 pomegranate farmers participated.

Capacity Building of In-charge/ Manager/ Supervisors/ representative of warehouseman and Secretaries of the PACCS of the warehouse registered with WDRA in Rajasthan state

Two days Seminar on Technology Transfer in Special Horticulture Crop-Pomegranate

Awareness Programme on Warehouse development and Regulations

Production Technology in Millet Farming and Dry Land and Rainfall based Agriculture

9.3.3 Workshop

Two-day's Workshop was organized in collaboration with Watershed Development and Soil Conservation, Govt. of Rajasthan during 5th to 6th June, 2023. In this workshop, officials from five State Agricultural Universities of Rajasthan, Project Managers of Watershed Department, NGOs, and other Govt. officers participated. In this Workshop MoU between Agriculture University, Jodhpur and Watershed and Soil Conservation Department was signed.

Two day's Workshop "Building partnership from Agreement to Action" during 5th to 6th June, 2023

9.3.4 DAESI

This Diploma was implemented by National Institute of Agricultural Extension Management (MANAGE). The purpose of this 48-week diploma is to build technical competency in agriculture among input dealers and to facilitate them to serve the farmers better and to act as para – extension professionals.

9.3.5 Goat Farming Training Programme

Kisan Kaushal Vikas Kendra organized three training programme(seven days each) on "Empowering Farmers Through Profitable Goat Farming Batch-I of goat farming training during 27 March to 2 April 2024 (22 Participants). Looking into the interest and demand by the farmers we continued the training program for two additional batch during 15th to 21 April, 2024 (22 Participants) and batch –III during 20th to 26th May, 2024 (31 Participants).

9.3.6 Training Programme on Value Addition

Training programme on "Value Addition in Agricultural Products" was organized during 2nd to 8th May, 2024 at Kisan Kaushal Vikas Kendra, in this training 21 participants participated and experts trained the participant for making various millet products like Millets Cake . Cookies , Laddu, Namkeen etc.

10. Social Welfare Activities in the Adopted villages

During past ten years Agriculture University, Jodhpur had adopted three villages viz. Neora Road, Tehsil Osian, District Jodhpur (2015 to 2018), Luni, Tehsil Luni, District Jodhpur (2018 to 2020) and Khudiyala, Tehsil, Balesar, District Jodhpur (2021 to continue) to develop them as Smart Village under University Social Responsibility. To deliver our social responsibility, the University has selected the least developed village (Antyodaya) and worked toward the betterment of rural society through community development in the village. The village wise various activities undertaken to achieve the goal of overall development of adopted village are briefly given below.

10.1 Adopted Smart Village: Neora Road, Tehsil Osian, District Jodhpur (2015 to 2018)

Agriculture University Jodhpur, on the directions received from the Raj Bhawan Jaipur, has adopted Neora road village for developing it into smart village and many developmental activities were carried out up to December 2018.

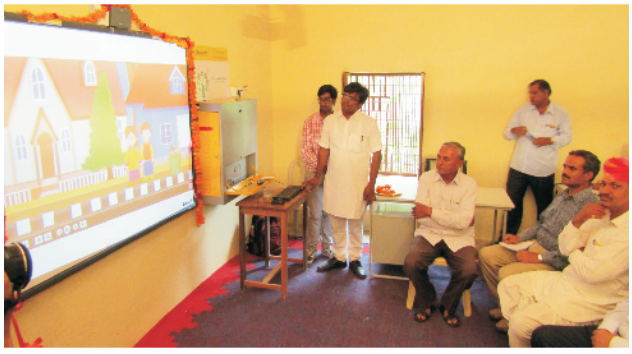
Major Activities

Nodal Officer and scientist of the University decided to develop Neora Road by introducing newly developed agro techniques, water harvesting and soil conservation along with other development aspects. Looking to the scarcity of underground water and to promote drip irrigation in field crops, demonstration of drip irrigation in castor was carried out at the village farm. Further, to disseminate this technology, field days and Vichar Gosthees were also organized. The village ponds were reconstructed for water collection under "Mukhyamantri Jal Swavlamban Yojana" in with the help of DRDA and District Collectorate officials.

During kharif 2015, 15 FLDs (front line demonstrations) of Castor Hybrid GCH 7, 15 FLDs of Green gram variety GM 4, 10 FLDs of Moth bean variety RMO 435, 5 FLDs of Sesame variety RT 351 were provided to the farmers for improving their farming system. Similarly, and to improve the production of Rabi Crops, 10 FLDs of Chickpea variety of RSG 888, 13 FLDs of Wheat containing varieties WH 1080, Raj 4083 and HD 3045 were distributed to the farmers.

Farmers' scientist interaction was organized in village Neora Road to solve the problem of Agriculture faced by the farmers. During this interface, farmers were advised to construct toilets and discourage eating tobacco products and use of polythene bags. Farmers were also apprised about overuse of pesticides especially in vegetable

crops. Expert also briefed about the integrated nutrient management, diseased and pest management, water and soil conservation, organic farming of crop and vegetables and crop varieties which can be raised in saline water. Villagers were also encouraged about the girl education and use helmets while driving two wheelers' vehicles. Villagers were trained by holding training programme of Dairy based Agro-employment. Programmes regarding vermicompost and organic vermicompost were also organized at the village. The university also organized campaign on Swach Bharat Mission at Neora Road village with the participation of 150 students, through this campaign villagers were motivated for keeping their home, road & their village clean and hygiene.



As initiative to launch ICT in the village school, the University created a smart class room in senior sec. school of Neora Road with the help of Bombay based NGO named IIFL Foundation. This smart class room will prove a mile stone in adoption of ICT in the village school and strengthen the youth in its implementation.

10.2 Adopted Smart Village: Luni, Tehsil Luni, District Jodhpur (2018 to 2020)

In the second phase, Agriculture University Jodhpur, adopted Luni village for developing it into smart village to achieve the objectives of Mission Antyodaya. Many developmental activities were carried out up to December 2020.

Activities

Farmers were motivated for adoption of arid fruit plantation (Ber and Gonda) which gave better result in saline water and sandy soil. 500 plants of Neem, Karanj, Pipla, Drustick, Gulmohar etc. were provided among the villagers for plantation in premises of school, college, Atal Seva Kendra, Community water Tank, Field and farm Houses of villagers.

Under Paramparagat Krishi Vikas Yojana (PKVY), farmers were motivated on organic cultivation of crops through the formations of 25 farmers group (20 farmers in each group, on agricultural crop/activity) for development as organic village. Furthers the University organized campaign on Swach Bharat Mission at Luni Village with the participation of 200 students and through this campaign villagers were motivated for keeping their home, road & their village clean and hygiene.

Medical health check-up camp with the collaboration of Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur were organized in which about 300 villagers' health checkup was by expert team and about 500 villagers drunk Ayurveda Kadha for prevention of swine flu virus.

Under Paramparagat Krishi Vikas Yojana (PKVY) developed Vermi-compost bed for development of Luni as organic village. 40 Chicks of Improved poultry breed - Pratapdhan were provided to 4 farmers for upliftment of socio-economic status of farmers through backyard poultry.

Farmers' interaction related to water management in kharif crops, drainage of excess water in pearl millet crop, care and management of newly planted trees at village and also awareness about health hazards in youths were organized. Awareness of villagers about Jal Shakti Abhiyan, water saving methods and management of water harvesting structures in village on community basis were promoted. Nodal Officer interacted with farmers about crop losses due to heavy rains, during interaction farmers were informed about Pradhan Mantri Fasal Bima Yojana to cover the risk of losses.

The team visited the adopted village Luni and discussed with villagers about future strategies for overall development of village and emphasized about creation of rainwater harvesting structure and overall adoption of sanitation in village. The team visited the site of community talab, nadis at village and gave necessary instructions to prepare a road map for overall development of village. 50 mini kit of vegetable seeds were provide for nutritional securities of villagers to develop Nutri-gardens.

Organized Covid 19 Awareness Cum Health: Camp- with the collaboration of Dr Sarvepalli Radhakrishnan Rajasthan Ayurved University Jodhpur were organized. Covid 19 awareness health camp were organized in which 5 specialist doctors and team of Ayurveda University Jodhpur examined 500 villagers and gave prescription for better health. 500 packets of Ayurvedic Kadha were provided to the farmers for prevention of Covid 19 virus and other diseases.

The university renovated the ponds/water reservoir located in the vicinity of Luni village through Gram Panchayat and MGNREGA and the expenditure were incurred from University Development Fund and the funds provided by the CSR of ONGC Jodhpur.

Development of Oxy Zone Park: The University team visited the adopted village Luni and discussed about the lay out plan for development of Oxy Zone Park for villagers with SDM and Tehsildar Luni. After thorough discussion, SDM Luni allotted about 1.25 ha land behind the SDM office building for development of this park. The land was undulated and covered with *Juliflora* and other shrubs. A total of 650 different oxygen releasing plants like Neem, Peepal, Paras Peepal, Sheesham, Arjun, Khejri, Rohida, Amaltas, Gulmohar, Champa, Chandani, and flower plant like Baugan vilia, Gudhal were planted in the park.

10.3 Adopted Smart Village: Khudiyala, Tehsil, Balesar, District Jodhpur (2021 to till date)

In third phase Agriculture University Jodhpur, adopted Khudiyala village from January2021, for developing it into smart village and many developmental activities were carried out till date.

Activities:

Sawachhta Campaign: The University Team visited Khudiyala village & interacted with Citizens of village and got feedback about requirement of villagers, use of specific potential natural resources available in the village. Approved different Schemes to be implemented by Agriculture University, Jodhpur for village development like rain water harvesting structures, sanitation, crop demonstrations and were inaugurated during the Sawachhta Campaign run by the University. A Sawachhta rally was also organized which gave a message to villagers about importance of sanitation.

Training programme for SC youths: Nodal officer along with Scientist visited Khudiyala village & organised training programme on Entrepreneurship development through Agriculture interventions (PHT) and interacted with villagers about Post Harvest Management of rabi crops, especially Cumin & Isabgol, discussed with farmers about making Mushroom Production Enterprise and production of Bio fertilizers at farm level. Discussed about use of gypsum in oil seed Crops and formation of FPO in adopted SMART Village.

Demonstration of Agricultural technology: On the same day after training session, demonstrated the improved agriculture technology, use of Water-Soluble fertilizers (NPK 19:19:19) in onion Crop for increasing the productivity and demonstrate Knapsack Sprayer Machines for efficient use of chemicals to minimize residual effect on Cumin Crop. 25 Knapsack Sprayer Machines and 100 Packets of Water-Soluble Fertilizers (NPK) were provide free of cost to the farmers.

Farmer Scientist interaction on kharif crops: 40 demonstrations of improved Bajra Seed Var.-MPMH-17 along with complete Package of Practices were provided to the farmers and also apprised about creation of rain water harvesting structures in village and overall sanitation in village.

Awareness camp for Covid-19 & Vaccination: Nodal officer visited Khudiyala village & looking to the Covid -19 infection and organised awareness camp for Covid-19. During the camp, apprised about the protocol of Covid 10 and 250 hand sanitizer and 250 Cotton masks were provided to the farmers and villagers.

The Nodal Officer visited the adopted village and discussed with Sarpanch about plantation programme at Village & development of park at village. After discussion, site were demarcated, and unwanted plants were removed and 2 ha was leveled for plantation. On the same day the work of JCB was started and cleared about 2.0 ha. land for Plantation.

A seven days training and skills programme for Schedule Caste women farmers Schedule Caste on tailoring and stitching of garments was organized in which 10 women farmers participated and were provided raw material like threads, needles, clothes, scissors etc. this programme was blessed by Hon'ble Governor of Rajasthan during his presence at Barmera at that time. Each beneficiary was provided a certificate and one Sewing Machine with foot operated paddles during this programme free of cost sponsored by SCSP Plan of ICAR, New Delhi.

An awareness programme on lumpy skin disease in cattle was organized in which the villagers were apprised about it and its preventive measure. Farmers Training Programme on scientific cultivation of Cumin was organized and farmers were advised to use IPM practices for better management of insect pest in Cumin Crop.

आयुर्वेदिक निशुल्क चिकित्सा शिविर: डॉ. सर्वपल्ली राधाकृष्णन राजस्थान आयुर्वेद विश्वविद्यालय, जोधपुर के सहयोग से ग्राम खुडियाला में एक दिवसीय स्वास्थ्य शिविर का आयोजन किया गया। इस शिविर में विशेषज्ञों ने गांव की महिलाये, बच्चो व वृद्वजनों के स्वास्थ्य की जांच की एवं निशुल्क दवाईयो का वितरण भी किया। इस शिविर में लगभग 300 लोगो का स्वास्थ्य परिक्षण किया गया।

स्वच्छता अभियान: विश्वविद्यालय की राष्ट्रीय सेवा योजना इकाई के सहयोग से गांव में स्वच्छता अभियान अन्तर्गत रैली निकालकर ग्रामिणों को स्वच्छता के प्रति जागरूक रहने का आग्रह किया। रैली के साथ–साथ स्वयं सेवा योजना इकाई के लगभग 40 स्वयं सेवकों ने गांव में फैले हुए प्लास्टीक व कचरे की झाडू लगाकर सफाई की साथ ही गांव के सार्वजनिक पार्क में उग रही अनावश्यक खरपतवार सुखे पत्तों को भी एकत्रित कर सफाई कार्य किया एवं विश्वविद्यालय द्वारा गावं में लगाये गये कचरा पात्रों को साफ करवाया गया। इस अभियान में गावं के सरपंच सहित लगभग 120 लोगों ने भाग लिया।

नशा मुक्ति एवं सीपीआर जागरूकता एवं प्रशिक्षण कार्यक्रम: गोदित गांव में नशा मुक्ति एवं सीपीआर जागरूकता एवं प्रशिक्षण कार्यक्रम का आयोजन किया गया। इस कार्यक्रम मे विशेषज्ञों द्वारा गांव की महिलाओं, युवाओं एवं बुजुर्गों में बढ़ रही नशे की लत से होने वाले नुकसान के बारे में विस्तार से बताया एवं नशे की लत की वजह से असमय हो रहे हृदयाघात के प्राथमिक उपचार हेतु सीपीआर के माध्यम से व्यक्ति की जान बचाने के उपाय बताये।

जल संरक्षण जागरूकता शिविर: गांव में जल संरक्षण हेतु जागरूकता शिविर का आयोजन किया गया। इस शिविर में ग्रामीणों को जल संरक्षण की विभिन्न विधियों से अवगत करवाया गया तथा गांव में बने तालाब की एनएसएस इकाई के स्वयं सेवकों द्वारा साफ–सफाई की गई एवं झाडीयों, बबूल को हटाया गया जिससे ग्रामीणों में जल संरक्षण के प्रति सकारात्मक सोच का उत्थान हुआ।

गांव के ऑक्सीजोन पार्क में बैंक ऑफ बडोदा के वित्तीय सहयोग से 5 जोधपुरी सेंड स्टोन से निर्मित बैंचों को लगवाया गया जिससे पार्क में घुमने के दौरान ग्रामीण बैठकर आराम कर सके।

महिलाओं में कौशल विकास हेतु फल व सब्जियों का मूल्य संवर्धन पर प्रशिक्षण कार्यक्रम: गांव की महिलाओं में कौशल विकास हेतु फल व सब्जियों के मूल्य संवर्धन विषय पर एक दिवसीय प्रशिक्षण का आयोजन किया। इस अवसर पर महिलाओं को कैर, सांगरी, काचरी, ग्वारफली इत्यादि फसलों को सुखाकर पैकिंग करने एवं बेचने तक की पूरी जानकारी से अवगत कराया। साथ ही परिवार के उचित पोषण विकास हेतु सब्जियों के बीज के मिनी किट भी उपलब्ध करवाये।

ऑक्सी जोन पार्क में प्ले जोन का विकास: ऑक्सी जोन पार्क में बच्चो के खेलने हेतु बन रहे प्ले जोन एरिया में लगनें वाले झुलो, मैरी गो राउंड, डक एवं फिसलपटी हेतु स्थान का चयन किया एवं उपस्थित ग्रामवासियों से इनकी सार संभाल रखनें का आग्रह किया।

पेस्टीसाइड के उचित उपयोग पर कृषक प्रशिक्षण: गोदित गांव में हिल इंडिया के सहयोग से पेस्टीसाइड के उचित उपयोग एवं रख–रखाव पर कृषक प्रशिक्षण का आयोजन किया गया। इस कार्यक्रम में उपस्थित कृषकों को पेस्टीसाइड का सावधानीपूर्वक उचित उपयोग करने का आग्रह किया। अधिकारियों ने बताया की पेस्टीसाइड जितना जमीन को जरूरत है उतना ही मात्रा में पेस्टीसाइड का इस्तेमाल करे। डकीटनाशकों का उपयोग कीडों की आर्थिक हानि स्तर अधिक होने पर ही करे। इस कार्यक्रम में उपस्थित लगभग 400 किसानों को सुरक्षा कीट का निशुल्क वितरण किया गया।

होम्योपैथिक जागरूकता एवं स्वास्थ्य शिविर: गोदित गांव मे एक दिवसीय होम्योपैथिक जागरूकता एवं स्वास्थय शिविर का आयोजन राजस्थान आयुर्वेद विश्वविद्यालय के सहयोग से किया गया। जिसमें विशेषज्ञ चिकित्सक ने शिविर में सोरायसिस, त्वचा की रूक्षता, नजला, दमा, जोडो के विकास, बवासीर, महिलाओं के अनियमित मासिक चक्र, मोटापा संबंधी रोगों के कुल 75 रोगियों की निशुल्क होम्योपैथिक औषधियां देकर उन्हें लाभान्वित किया गया एवं इस अवसर पर आयोजित संगोष्ठि में लगभग 145 ग्रामीणों को होम्योपैथिक चिकित्सा पद्धति के बारे में जागरूक किया गया।

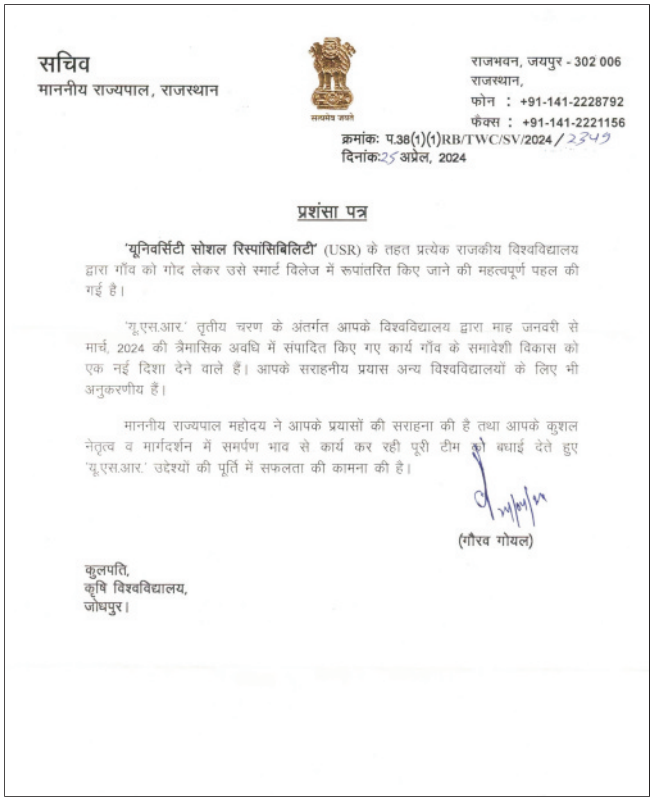
कम्प्यूटर वितरण एवं वृक्षारोपण कार्यक्रम: गोदित गांव में गणतंत्र दिवस के कार्यक्रम आयोजित किया गया तथा गांव के छात्रों में कम्प्यूटर साक्षरता बढाने के उद्देश्य से राजकीय उच्च माध्यमिक विद्यालय में दो कम्प्यूटर एवं एक कम्प्यूटर महात्मा गांधी अंग्रेजी माध्यम में भेट किया एवं ग्रामीणों कें साथ राजकीय उच्च माध्यमिक विद्यालय में और आक्सी–जोन पार्क में वृक्षारोपण भी किया।

गोदित ग्राम खुडीयाला में एक दिवसीय कृषक प्रशिक्षण व प्रक्षेत्र दिवस का आयोजन किया गया। इस हेतु, रबी मौसम में विश्वविद्यालय के निर्देशन में संचालित बार्क (भाभा परमाणु अनुसंधान केंद्र) परियोजना के अंतर्गत रायडा की दो उन्नत किस्मों (राज्य स्तर पर चिन्हित) ट्रोम्बे जोधपुर मस्टर्ड 1 और ट्रोम्बे जोधपुर मस्टर्ड 2 का बीज तथा विश्वविद्यालय द्वारा विकसित पीली सरसों की किस्म जोधपुर येल्लो सरसों 1 और जोधपुर पीली सरसों 2 का बीज किसानों को वितरित किया गया।

नशा मुक्ति जागरूकता शिविर: गोदित ग्राम खुडीयाला में एक दिवसीय नशा मुक्ति जागरूकता शिविर का आयोजन डॉ सर्वपल्ली राधाकृष्णन आयुर्वेद विश्वविद्यालय जोधपुर के सहयोग से किया गया। कार्यक्रम मे को नशे से दूर रहने, कि पैसे के साथ–साथ नशा समूल जीवन की बर्बादी है इसलिए इस से दूर रहते हुए स्वस्थ जीवन शैली को अपनाएं। युवा पीढ़ी नशा मुक्त रहकर ही स्वर्णिम भविष्य की नींव रख सकती है।

महिलाओं को एकीकृत बाल विकास सेवा का जागरूकता कार्यक्रम का आयोजन: गोदित ग्राम खुडीयाला में एकीकृत बाल विकास सेवा पर जागरूकता कार्यक्रम का आयोजन किया गया। इस कार्यक्रम में उपस्थित महिलाओं को बताया कि एकीकृत बाल विकास सेवा (ICDS) के अन्तर्गत 0–6 वर्ष तक के बच्चों व गर्भवती एवं स्तनपान कराने वाली माताओं के स्वास्थ्य, पोषण एवं शिक्षा में सुधार हेतु सरकार द्वारा विभिन्न जागरूकता कार्यक्रम चलाये जा रहे हैं।

10.4 Appreciation certificates



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क्रमांक: प.38(1)(1)RB/TWC/SV/2024/2349
दिनांक: 25 अप्रेल, 2024

प्रशंसा पत्र

'यूनिवर्सिटी सोशल रिस्पांसिबिलिटी' (USR) के तहत प्रत्येक राजकीय विश्वविद्यालय द्वारा गाँव को गोद लेकर उसे स्मार्ट विलेज में रूपांतरित किए जाने की महत्वपूर्ण पहल की गई है।

'यू.एस.आर.' तृतीय चरण के अंतर्गत आपके विश्वविद्यालय द्वारा माह जनवरी से मार्च, 2024 की त्रैमासिक अवधि में संपादित किए गए कार्य गाँव के समावेशी विकास को एक नई दिशा देने वाले हैं। आपके सराहनीय प्रयास अन्य विश्वविद्यालयों के लिए भी अनुकरणीय हैं।

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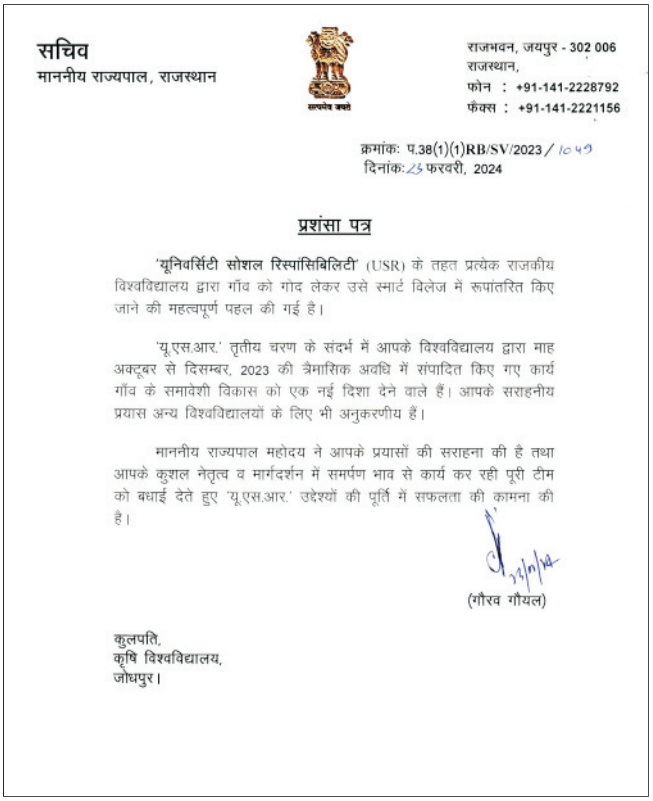
(गौरव गोयल)

कुलपति,
कृषि विश्वविद्यालय,
जोधपुर।



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क्रमांक: प.38(1)(1)RB/SV/2023/1049
दिनांक: 23 फरवरी, 2024

प्रशंसा पत्र

'यूनिवर्सिटी सोशल रिस्पांसिबिलिटी' (USR) के तहत प्रत्येक राजकीय विश्वविद्यालय द्वारा गाँव को गोद लेकर उसे स्मार्ट विलेज में रूपांतरित किए जाने की महत्वपूर्ण पहल की गई है।

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(गौरव गोयल)

कुलपति,
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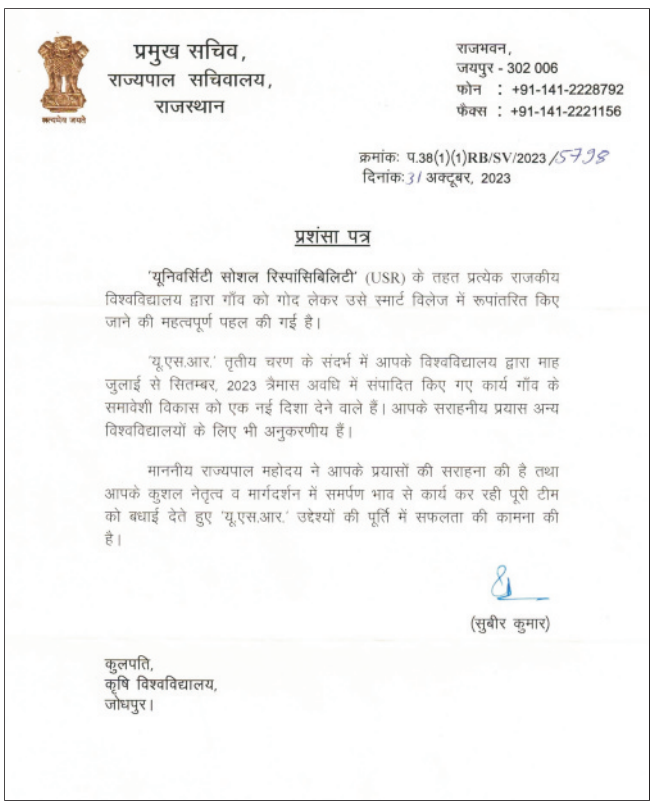

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दिनांक: 31 अक्टूबर, 2023

प्रशंसा पत्र

'यूनिवर्सिटी सोशल रिस्पांसिबिलिटी' (USR) के तहत प्रत्येक राजकीय विश्वविद्यालय द्वारा गाँव को गोद लेकर उसे स्मार्ट विलेज में रूपांतरित किए जाने की महत्वपूर्ण पहल की गई है।

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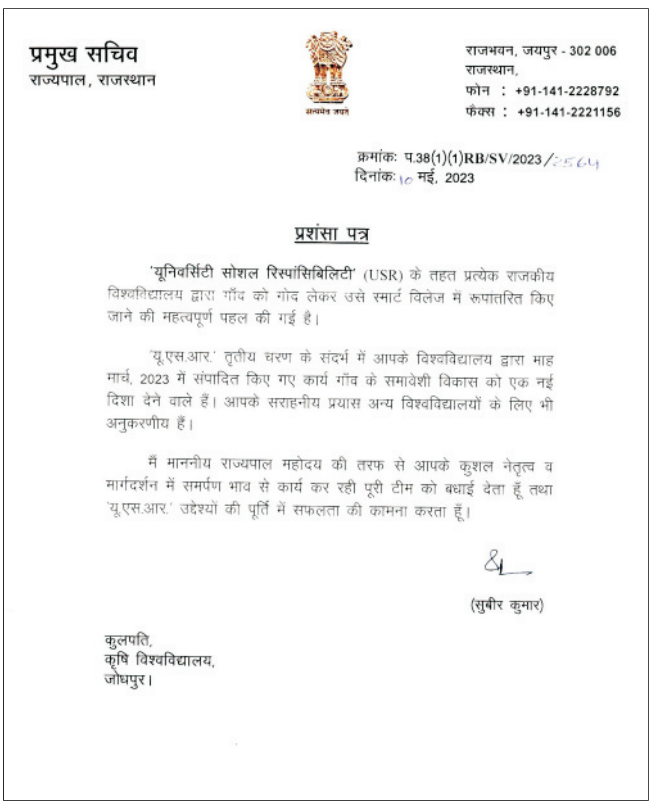
(सुबीर कुमार)

कुलपति,
कृषि विश्वविद्यालय,
जोधपुर।



प्रमुख सचिव
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क्रमांक: प.38(1)(1)RB/SV/2023/2564
दिनांक: 10 मई, 2023

प्रशंसा पत्र

'यूनिवर्सिटी सोशल रिस्पांसिबिलिटी' (USR) के तहत प्रत्येक राजकीय विश्वविद्यालय द्वारा गाँव को गोद लेकर उसे स्मार्ट विलेज में रूपांतरित किए जाने की महत्वपूर्ण पहल की गई है।

'यू.एस.आर.' तृतीय चरण के संदर्भ में आपके विश्वविद्यालय द्वारा माह मार्च, 2023 में संपादित किए गए कार्य गाँव के समावेशी विकास को एक नई दिशा देने वाले हैं। आपके सराहनीय प्रयास अन्य विश्वविद्यालयों के लिए भी अनुकरणीय हैं।

मैं माननीय राज्यपाल महोदय की तरफ से आपके कुशल नेतृत्व व मार्गदर्शन में समर्पण भाव से कार्य कर रही पूरी टीम को बधाई देता हूँ तथा 'यू.एस.आर.' उद्देश्यों की पूर्ति में सफलता की कामना करता हूँ।

(सुबीर कुमार)

कुलपति,
कृषि विश्वविद्यालय,
जोधपुर।

11. Publication

2013

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