

# INSTITUTIONAL DEVELOPMENT PLAN



उत्तमा वृत्तिस्तु कृषिकर्मव

**SWAMI KESHWANAND RAJASTHAN AGRICULTURE UNIVERSITY  
BIKANER (RAJ.)**





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## PREFACE

I am pleased to present the Institutional Development Plan (IDP) of Swami Keshwanand Rajasthan Agricultural University (SKRAU), Bikaner. This comprehensive document outlines our strategic vision, developmental goals, and actionable initiatives aimed at fostering academic excellence, research innovation, and sustainable agricultural practices in the region.

As a premier institution dedicated to agricultural education and research, SKRAU has played a pivotal role in enhancing the livelihoods of farmers and contributing to the agricultural growth of Rajasthan and beyond. The IDP is a well-structured roadmap that aligns with our mission to develop skilled human resources, promote cutting-edge research, and strengthen our outreach programs to address real-world agricultural challenges.

Our plan emphasizes key focus areas such as infrastructure development, faculty empowerment, student welfare, and the adoption of advanced technologies in teaching, research, and extension activities. By strengthening partnerships with industry, government agencies, and the farming community, we aim to bridge the gap between scientific innovation and field-level implementation.

I extend my heartfelt gratitude to the dedicated team of faculty members who contributed their expertise and insights in preparing this document. I am confident that this Institutional Development Plan will serve as a guiding framework for SKRAU to achieve new milestones in agricultural education, research and extension.

With this document, we reaffirm our commitment to serving the farming community, empowering rural youth, and contributing to the sustainable development of agriculture in Rajasthan and India.

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# University at a Glance

## Establishment of the University

Swami Keshwanand Rajasthan Agricultural University Bikaner (erstwhile Rajasthan Agricultural University) was originally established in 1962 at Udaipur on US Land Grant Model. Thereafter, the University underwent a lot of changes from assuming the shape of a multi-faculty University to carving out in its present form in 1987 at Bikaner (Gazette notification under Act No. 39 of 1987 of Rajasthan State Assembly). However, Rajasthan being the largest state of the country, covering, 10.4 percent of the land mass, and need for emphasis on diverse agro-ecological conditions across the state at that time the university was bifurcated in 1999 with the creation of Maharana Pratap University of Agriculture and Technology, Udaipur with 10 districts in its jurisdiction and Rajasthan Agricultural University, Bikaner was left with 21 districts out of 31 of the total districts of the state. Later on in 2010, the Veterinary & Animal Sciences component came into being in the form of Rajasthan University of Veterinary & Animal Sciences, Bikaner. Considering the immense contribution of Swami Keshwanand Ji to education in rural areas of north western Rajasthan, his name was prefixed to the university in 2009 (Ordinance No. 2 of 2009, dated June 9, 2009). Further in the year 2013, SKRAU Bikaner having a large area under its control was again divided into three Universities viz., SKRAU, Bikaner; Agriculture University, Jodhpur and Shri Karan Narendra Agriculture University, Jobner (Jaipur). Presently, the University has three agro-climatic zones viz. Irrigated North Western Plain Zone of Sriganganagar and Hanumangarh districts (Zone Ib), Hyper-Arid Partially Irrigated Zone (Zone I c) of Bikaner, Jaisalmer and Churu districts Zone, Transitional Plain of Inland Drainage of Jhunjhunu, and part of Churu districts (Zone II a) under its territorial jurisdiction. The university covers the majority of the area defined as "Western Arid agro-biodiversity hotspot" as mentioned by Protection of Plant Varieties & Farmers' Rights Authority, Government of India, thus the university falls under the hot arid region of the country. High and low temperatures, low rainfall, low relative humidity, high potential evapotranspiration, high sunshine, abundant solar energy, sparse vegetation and high wind velocity during summer characterize this area. Cotton, cluster bean, pearl millet, moth bean and groundnut are some of the major crops of Kharif and wheat, mustard, gram and seed spices are important crops of the Rabi season. Over the last 37 years, the university is marching ahead with renewed vision to address complex challenges and to harness domestic and global opportunities for welfare of farmers, consumers and other stakeholders in the fields of agricultural and allied sectors, for the development of human resource and socio-economic upliftment of the farming community which is reflected in terms of increase in agricultural production and gender equality as more and more girl students are opting for under graduation and PG degree programmes in agriculture.



## Mission

"To advance agricultural knowledge and innovation through cutting-edge research, high-quality education and transfer of technology. To develop a sustainable agricultural and allied practice, empower students with the skills and knowledge necessary to lead in the agricultural and allied sectors, and contribute to the holistic economic, environment and social development of the region".

## Goals

Overall goal of the Agricultural University is to bring about agricultural development of the region, produce efficient agricultural professionals to carry out research on the basis of feedback and need-based problems, transfer latest technological interventions accurately and timely to the government agencies and the farming community.

## Governance

The university is chartered by the state of Rajasthan with the Governor as ex-officio Chancellor of university. The Vice Chancellor is the highest executive authority for academic and administrative control of the university. With two important statutory bodies, i.e. the Board of Management (BoM) and the Academic Council, the Vice Chancellor takes and implements the decisions through concerned authorities and officers. The university has five colleges of Agriculture (Bikaner, Sriganganagar, Hanumangarh, Chandgotti (Churu), Mandwa (Jhunjhunu), A College of Community Science, Bikaner and one Institute of Agri-Business Management at Bikaner. The University also has 7 KVKs, 2 Agricultural Research Stations, 1 Sub-Station (ARSS) and an Agricultural Technology Information Centre (ATIC). Directorates of Research, Extension Education main campus, Prioritization, Monitoring and Evaluation and Human Resource Development and Dean, Post Graduate Studies offices are also situated at headquarters. To facilitate students' welfare activities, Directorate of Students' Welfare and Sports Board are functional at Bikaner. To keep the campus and the state green, Directorate of Landscaping & Revenue Generation has also been established at the university headquarter. Besides these, an Administrative Wing, Estate Office, National



### **Linkages with National and International organization**

The university has linkages with Central Institute of Arid Horticulture (CIAH), Bikaner; Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), Bikaner; National Research Centre on Camel (NRCC), Bikaner; CAZRI Regional Sub Station, Bikaner and Central Sheep and Wool Research Institute. Directorate of Research has linkages with International Crop Research Institute for Semi Arid Tropics (ICRISAT), Hyderabad, International Centre for Agricultural Research in Dry Areas (ICARDA), Lebanon and National Centre for Integrated Pest Management (NCIPM), New Delhi for collaborative researches.

### **MoUs Signed by the University**

| <b>S.No.</b> | <b>Year of signing MoU</b> | <b>Name of the organization with whom MoU/Collaboration being signed</b> | <b>Duration</b> |
|--------------|----------------------------|--------------------------------------------------------------------------|-----------------|
| 1            | 2019                       | ICAR New Delhi                                                           | Five Years      |
| 2            | 2019                       | RAJUVAS, Bikaner                                                         | Five Years      |
| 3            | 2019                       | MGSU, Bikaner                                                            | Five Years      |
| 4            | 2019                       | Bikaner Technical University, Bikaner                                    | Five Years      |
| 5            | 2019                       | ICAR-NRCC, Bikaner                                                       | Three Years     |
| 6            | 2021                       | CSIR-CEERI, Pilani, Rajasthan                                            | Five Years      |
| 7            | 2021                       | ICAR-CSWRI, Avikanagar                                                   | Five Years      |
| 8            | 2022                       | ICAR-NRC for Equines, Hisar                                              | Five Years      |
| 9            | 2022                       | ICAR-NBPGR, New Delhi                                                    | Five Years      |
| 10           | 2022                       | ICAR-IIWBR, Karnal (Haryana)                                             | Five Years      |
| 11           | 2022                       | Tara Blooms Private limited                                              | Five Years      |
| 12           | 2023                       | ICAR-IIPR, Kanpur                                                        | Three Years     |
| 13           | 2023                       | Dhanuka Agritech Limited                                                 | Three Years     |
| 14           | 2024                       | RNB Global University, Bikaner                                           | Five Years      |
| 15           | 2024                       | Tantia University, Sriganganagar                                         | Five Years      |
| 16           | 2024                       | ICAR-CIAH, Bikaner                                                       | Five Years      |
| 17           | 2024                       | Gujarat Natural Farming Science University                               | Five Years      |
| 18           | 2024                       | Banda University of Agriculture and Technology, Banda, U.P.              | Five Years      |
| 19           | 2024                       | Institute of Horticulture Technology, Greater Noida, Delhi               | Five Years      |

### **Collaboration with Academic Institutions and Industry**

Academia-industry interface is characterized by the interactive and collaborative programme between academic institutions and the industrial sector for the attainment of certain reciprocally beneficial purposes and missions. All seven constituent colleges of SKRAU, Bikaner namely, College of Agriculture, Bikaner, College of Agriculture, Sriganganagar, College of Agriculture, Chandgothi (Churu), College of Agriculture, Hanumangarh, Late Shri Ramnarayan Chaudhary College of Agriculture, Mandawa, College of Community Science, and Institute of Agri-business Management are in synergy with industry through different modes. The Institute of Agri-business Management entails the following:-

- The representation of Industry Executives is solicited as members of the Board of Studies in developing and finalizing the course curriculum to be followed for MBA (Agri-Business) Programme.
- Under the Industrial Outreach Programme as a part of the course curriculum for the MBA Part-I semester, the students are sent for two weeks of industrial attachment with agro-based organizations like URMUL Trust, Star Agri Warehousing, Central Warehousing Corporation, Vinayak Dairy, Anaaj Mandi, etc
- Summer Internships are required to be taken by all MBA Agri-Business Management students after completing one year in different organizations for a period of 6 to 8 weeks during summer months. Each student is selected by a reputed company and given a practical assignment that is critically appraised by the faculty members, and agricultural scientists and presented in the form of seminars with the participation of all other students. This platform has become a very important source of information exchange and knowledge as all the students are associated with different industries.
- Students Project Report under academic requirement is taken up with the organizations ranging from agri-input companies to banks, agri-consultancy, and retail and micro finance-analyzed in coordination with the concerned organization and research scientists of the University. The organization too benefits through these projects in their strategic decision-making in areas like marketing, human resources, new product development, financials, and supply chain management.
- Students are sent on Industrial visits to attain practical knowledge and their theoretical applications thereof. The students have visited companies like Chambal Fertilizers and Chemicals Ltd, Kota, DCM Shriram (Fertilizer Plant) Consolidated Ltd., Kota, Jubilant Organosys (Fertilizer plant), Chittorgarh. Research Lab of PI Industries Ltd, NDDDB, Gujarat, Mc Cain Production Plant, Mehsana, AMUL, Anand, National Innovation Foundation, Ahmedabad.
- Guest lectures of eminent personalities from various Industries and Institutions are arranged for students that enrich their knowledge about industry needs, the latest technical updates, avenues for higher studies, etc.
- Under academics, institutions like IIM, Ahmedabad, CCS-NIAM, Jaipur, and different research stations of various Agricultural Universities are visited by the students along with holding guest lectures from eminent speakers from reputed institutions. The institute has also undertaken ICAR Extra Mural Research Project in the institute.

At the College of Community Science, the students visit various industries and agencies for exposure visits and research work. They are sent to different agencies viz. newspaper offices, TV channels, textiles Industries, hospitals, and hotels in Bikaner and other cities.

At the College of Agriculture, research projects of private industries are taken up, students are sent for industrial visits under different practical courses. Further, guest lecturers of industrialists from agriculture and allied sectors too are arranged for students. The Student READY programme introduced at the Undergraduate level engages the students with different agro-based industries.

**Research and Extension:** The University is carrying out projects funded by different agencies of Gol and GoR through ICAR, RKVY, NABARD as well as other organizations. Research and Extension linkages of the University with academic institutions and industries are mentioned below:

**Linkages and Networking with external agencies in Research/Extension/Teaching**

|                                     | Agency                                                                                                                                                                                                                                                                                        | Details                                                                                                                        |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Collaboration and Networking</b> |                                                                                                                                                                                                                                                                                               |                                                                                                                                |
| <b>International</b>                | ICRISAT, Hyderabad                                                                                                                                                                                                                                                                            | Getting grant to conduct experiments on Pearl millet crop                                                                      |
| <b>National</b>                     | ICAR, New Delhi                                                                                                                                                                                                                                                                               | All India Coordinated Research Project/Revolving Fund/any other such scheme sanctioned by ICAR, Grant in the form of 14 AICRPs |
|                                     | NCPAAH, MoAFW, New Delhi                                                                                                                                                                                                                                                                      | Grant in Aid in the form of PFDC project                                                                                       |
|                                     | IMD, MoES, New Delhi                                                                                                                                                                                                                                                                          | Grant in Aid in the form of Projects GKMS and FASAL                                                                            |
|                                     | ICAR-IIPR, Kanpur                                                                                                                                                                                                                                                                             | Students Training/Postgraduate Research/Collaborative Research & Seed Production                                               |
|                                     | ICAR-NRC on Equines, Hisar                                                                                                                                                                                                                                                                    | Development of exchange programme for academic and educational needs Research and Extension activities                         |
|                                     | ICAR-NBPGR, New Delhi                                                                                                                                                                                                                                                                         | Students Training/Postgraduate Research                                                                                        |
|                                     | ICAR-IIWBR, Karnal, Haryana                                                                                                                                                                                                                                                                   | Students Training/Postgraduate Research                                                                                        |
|                                     | ICAR-IISS, Bhopal                                                                                                                                                                                                                                                                             | PG & PhD research                                                                                                              |
|                                     | NABI (National Agri-Food Biotechnology institute), Mohali                                                                                                                                                                                                                                     | PG & PhD research                                                                                                              |
|                                     | Indian Council for Cultural Research, Gol, Jaipur                                                                                                                                                                                                                                             |                                                                                                                                |
|                                     | Indian Red Cross Society, New Delhi                                                                                                                                                                                                                                                           |                                                                                                                                |
| <b>Other University</b>             | RAJUVAS, Bikaner<br>MPUAT, Udaipur<br>Maharaja Ganga Singh University, Bikaner<br>Bikaner Technical University, Bikaner<br>RNB Global University, Bikaner<br>Tanta University, Sriganaganagar<br>Rajasthan ILD Skills university, Jaipur<br>Dev Sanskrit Vishwavidhalya, Gyatri Kunj Haridwar |                                                                                                                                |
| <b>Other Organization</b>           | ICAR-NRC on Camel, Bikaner<br>ICAR-CIAH, Bikaner<br>ICAR-CSWRI, Avikanagar<br>CSIR-CEERI, Pilani, Jhunjhunu<br>CCS-NIAM, Jaipur<br>Dhanuka Agritech Ltd.                                                                                                                                      | Education, Research and Extension activities                                                                                   |
|                                     | Willowood Chemicals Private Limited                                                                                                                                                                                                                                                           | Financial sponsoring of deserving and meritorious candidate of IABM with Smt. Gawar Devi Mundhra Scholarship                   |
|                                     | Karni Bikaner Water Environment Foundation, Bikaner<br>Bikaner Eco Friendly Foundation<br>Directorate of Literacy and Continuing                                                                                                                                                              |                                                                                                                                |

## Collaborative Programmes

For any university to offer quality academic programmes, liaison with the research institutes in relevant fields is a must so that the students and staff get exposed to the new technologies being developed at the research institutes. Swami Keshwanand Rajasthan Agricultural University, Bikaner is fortunate one as many of the ICAR institutes/substations and Rajasthan University of Veterinary and Animal Sciences are located at Bikaner. In addition to having liaisons with the ICAR institutes at the local level, the University also have linkages with ICAR institutes within and outside the state. The following are some of the institutions with which the University has linkages for UG and PG programmes.

- Central Institute of Arid Horticulture, Bikaner
- Central Arid Zone Research Institute, Sub-Station, Bikaner
- Central Sheep and Wool Research Institute, Sub-Station, Bikaner
- National Research Centre for Camel, Bikaner
- National Research Centre on Equines, Sub-Station, Bikaner

## Staff strength of the University

### (A) Teaching

#### Sanctioned, Filled and Vacant position

| S.No. | Designation                              | Sanctioned post | Filled post | Vacant post |
|-------|------------------------------------------|-----------------|-------------|-------------|
| 1     | Professor                                | 14              | 02          | 12          |
| 2     | Assoc. Professor                         | 50              | 13          | 37          |
| 3     | Assistant Professor                      | 140             | 58          | 82          |
| 4     | Senior Scientist and Head                | 07              | 06          | 01          |
| 5     | Assistant Librarian                      | 06              | 01          | 05          |
| 6     | Assistant Director of Physical Education | 02              | 00          | 02          |
| 7     | Subject Matter Specialist                | 40              | 14          | 26          |
|       | <b>Total</b>                             | <b>259</b>      | <b>94</b>   | <b>165</b>  |

**B. Non-teaching**  
**Sanctioned, Filled and Vacant position**

| S.No. | Designation                             | Sanctioned post | Filled post | Vacant post |
|-------|-----------------------------------------|-----------------|-------------|-------------|
| 1     | Officer                                 | 13              | 06          | 07          |
| 2     | Ministerial                             | 175             | 77          | 98          |
| 3     | Technical                               | 155             | 46          | 109         |
| 4     | Supporting                              | 150             | 89          | 61          |
| 5     | Supporting (For home guard and retired) | 16              | 16          | 00          |
|       | <b>Total</b>                            | <b>509</b>      | <b>234</b>  | <b>275</b>  |

**University Budget**  
**Budget for the last three years**  
**Total University Budget**

(Rs. in lakhs)

| Head                     | 2021-2022      | 2022-2023      | 2023-2024       |
|--------------------------|----------------|----------------|-----------------|
| Internal Revenue         | 904.19         | 1714.84        | 1725.03         |
| State Fund (Non Plan)    | 0.00           | 0.00           | 0.00            |
| State Fund ( State Plan) | 5441.00        | 5644.00        | 5723.01         |
| I.C.A.R                  | 2146.01        | 1883.17        | 2158.80         |
| O.C.S                    | 242.99         | 206.02         | 438.19          |
| <b>Total</b>             | <b>8374.19</b> | <b>9502.03</b> | <b>10045.03</b> |

**Expenditure Head-wise**

| Head                     | 2021-2022      | 2022-2023      | 2023-2024      |
|--------------------------|----------------|----------------|----------------|
| State Fund (Non Plan)    | 0.00           | 0.00           | 0.00           |
| State Fund ( State Plan) | 4838.84        | 6277.93        | 7070.49        |
| I.C.A.R                  | 1983.71        | 1676.07        | 2081.43        |
| O.C.S                    | 168.17         | 268.96         | 320.58         |
| <b>Total</b>             | <b>6990.72</b> | <b>8222.96</b> | <b>9472.50</b> |

**Expenditure Details****Expenditure Head wise (April 2023 to March )****( Rs. in lakhs)**

| Source             | State Fund<br>(State Plan) | I.C.A.R        | Other         | Total          |
|--------------------|----------------------------|----------------|---------------|----------------|
| Governance         | 1081.79                    | 0.00           | 0.00          | 1081.79        |
| Education          | 3845.12                    | 580.09         | 0.00          | 4425.21        |
| Research           | 466.75                     | 583.73         | 320.58        | 1371.06        |
| Extension          | 271.63                     | 917.61         | 0.00          | 1189.24        |
| Library            | 13.99                      | 0.00           | 0.00          | 13.99          |
| Student Activities | 60.96                      | 0.00           | 0.00          | 60.96          |
| Civil              | 1330.25                    | 0.00           | 0.00          | 1330.25        |
| <b>Total</b>       | <b>7070.49</b>             | <b>2081.43</b> | <b>320.58</b> | <b>9472.50</b> |

**Decentralization of Powers:**

SKRAU is authorized by GoR with the authority to provide instructions in agriculture and its allied subjects, award degrees, diplomas, and other distinctions. The university is also authorized to conduct research and provide extension services. It is empowered to maintain academic institutions dealing with Agriculture, Community Science, and Agri-Business Management to carry out instructions in these faculties, conduct examinations, and confer degrees, etc. In the interest of the university, all types of administrative decisions are taken by BoM, the academic decisions are taken up in the Academic Council and the decisions regarding financial matters are taken by the Finance Committee.

Apart from this, the university has a complete decentralization system concerning both fiscal and administrative dimensions. All types of administrative and financial powers have been delegated to all Deans, Directors, ZDRs and other officials of the University vide Resolution no, vide order no. F.1. (Misc) (40) Integrated/71-71/269 dated 31.1.78, No. F. 4 (1-R) (1) RAJAU/C/89-90/7079-140 dated 10.1.91 and Order No. F. 4 (1-R) (14)/RAJAU/C/91/9346- 9416 dated 9/13.01.1992.

**The powers delegated to various committees of the University are as follows:**

**Board of Management**

The Board of Management exercises the powers given below and performs the

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following functions:

- To manage and administer the finance, revenue, assets, and properties and also to acquire, dispose of, hold, or control the budget
- To control and supervise all the administrative affairs of the University
- To approve or sanction the annual budget of the University
- To administer the funds placed at the disposal of the University for specific purposes
- To create posts of teachers, and employees in the academic or administrative or any other department or office, and also to determine the terms and conditions of service of teachers/employees
- To specify the qualifications and functions of the teachers and employees
- To constitute committees, standing or temporary for a specific purpose
- To permit or approve the borrowing of money and to make arrangements for its repayment
- To invest money in stocks, funds, or securities or approved banks, or other financial institutions or for the purchase of assets or properties with the Finance Committee's recommendation
- To regulate and approve the appointments of Visiting Professors, Emeritus Professors, Fellows, Scientists, and Experts and to determine the terms and conditions of such appointments
- To enforce discipline among teachers and employees, and to regulate and determine all matters concerning the University in accordance with the Act and the Statutes

### **Academic Council**

The Academic Council exercises the powers given below and performs the following functions:

- To supervise, control, and regulate the academic policy of the University
- To give direction in matters of teaching, examinations, evaluation, etc.
- To take action for the improvement of the academic standards
- To make regulations for academic functioning, discipline, admission, fellowship, fee, and other ancillary matters, and
- To do any other thing or act as may be prescribed from time to time

### **Finance Committee**

Financial support for SKRAU comes from the Central and State Governments through various channels. Allocations are received and distributed through the financial management system under the direction and approval of the Vice-Chancellor and under the Management of the Comptroller, who is presently appointed by the State Government.

The Finance Committee performs the following functions:

- To examine the annual accounts and the budget estimates and propose to the Board of

### Management thereon

- To review the financial position of the university from time to time and put it before the Board of Management, and
- To report to the Board of Management on any matter of finance, or any proposal, involving revenue and expenditure

### Technology Support

Quality education is an essential requisite in today's competitive environment where technology has affected us in every aspect of life. New methods of teaching have been introduced as Smart Classrooms using instructional material, 3D animated modules, and videos. These videos are eye-catching; hence students can eagerly understand and relate to them.

Technology supports like computer laboratory, online learning tools, internet/Wi-Fi connectivity, and smart classrooms with all digital amenities like a digital podium, interactive boards, projectors, etc. are available in different colleges, the central library, and other important units of the University. A leased line connection of 1 GBPS has been procured for LAN/WAN connectivity to different units. Internet connectivity has also been provided in students' hostels and each student has also been allotted a user ID and password

### Information on classroom technology

|                                                                                                  |                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1) Technologies in rooms, Computer Lab etc.                                                      | University Campus<br>a. Campus is enabled with high-speed internet & Wi-Fi facilities for all PG, Ph.D., and UG students and staff<br>b. All college classrooms are equipped with Information technology<br>i. College of Agriculture, Bikaner<br>ii. College of Community Science, Bikaner<br>iii. Institute of Agri-Business Management, Bikaner |
| 2) Online learning tools                                                                         | Available (CeRA)                                                                                                                                                                                                                                                                                                                                   |
| 3) Internet/Wi-Fi connectivity                                                                   | Available                                                                                                                                                                                                                                                                                                                                          |
| 4) Student system (e.g. online enrolment)                                                        | Yes                                                                                                                                                                                                                                                                                                                                                |
| 5) Business application                                                                          | Software for Comptroller office (IUMS: Integrated University Management System for salaries, pensions, etc.), (PFMS: Public Finance Management System); Purchasing Government e-Marketplace (GeM) e-filing introduced for all correspondence among different units                                                                                 |
| 6) Computer held-setup for e-mail and password resets being implemented at the university level. | Email Ids of all units of the University have been provided by CIMCA SKRAU website (www.raubikaner.) is designed using ASP.NET 4.0 and classic ASP with MSSQL database.                                                                                                                                                                            |

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## **Institutional Database and Website Update**

Centre for Information Management and Computer Applications (CIMCA) centrally maintains the University's website where all the activities related to education, research, extension, and all other activities related to the university are regularly uploaded on the University website [www.raubikaner.org](http://www.raubikaner.org). The details of all the offices working under university jurisdiction, staff, tenders, vacancies, Content Mgt. System (CMS) of Agro Advisory and Weather Forecasting are available on the University website. CIMCA keeps close liaison with different units of the university about their significant events and keeps the website updated as and when required. The information is also shared on the AISHE portal of UGC and the HTE portal of GoR where students, course management system, and faculty profiles can be accessed. The details of research, extension, and other directorates and their units are available on the website along with their projects and various publications of the University such as Annual Reports, Vision documents, SKRAU newsletters, ChokhiKheti etc. SKRAU website ([www.raubikaner.org](http://www.raubikaner.org)) is designed using ASP.NET 4.0 and classic ASP with MSSQL database

- The website is facilitated with Screen Reader Access compatibility for visually impaired persons along with the feature of management of font size (supported by specific app).
- Google mail engine has provided a facility for e-mails, each of 15 GB capacity to the university which has been further given to different offices of the University.

A visitor's counter is also available on the University website which has recorded more than 46lakhvisitorsin the upto May, 2024.

## **Interdepartmental Linkages**

The University is currently adopting a decentralized, participatory, adaptive, and multifarious demand-supply side -Coordination extension-research-academic approach which involves public, private, and civil society. All three components of the University viz. education, research, and extension are linked with each other in participatory mode and the faculties of these units are involved in all three activities working on the principle of integration. Faculty of research and extension are also providing their feedback and contributing to teaching as well as guiding the students in all constituted colleges of the University. Similarly, the faculties posted to teaching provide their inputs in research and extension activities as and when required. Scientists of different departments are involved in diverse research projects along with guiding PG/research students in collaborative mode. The students of the College of Home Science are offered courses in agriculture viz. agronomy, horticulture, statistics, animal science, library Science, etc. for which the agriculture faculty is assigned to take the classes. Similarly, teachers from other teaching units of the University are interlinked in teaching and student-guiding activities. They are also members in advisory committees of PG and Ph.D. students and multidisciplinary projects are carried out by involving scientists from other disciplines. Research and extension priorities of different zones are finalized by the ZREAC (Zonal Research &

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Extension Advisory Committee) of the respective agro-climatic zones. The officials of the State Agricultural Department, ICAR Institutes, and progressive farmers are important members of ZREAC meetings in finalizing the recommendations and future research and extension activities. These recommendations are further passed on to KVKs for dissemination to the farmers in the form of technologies. The private and third sector i.e., civil society is an important component being taken up by the University for strengthening the capacity of the student's research and extension that is farmers, researchers, and extension workers. Under RKVY, the University also established the Farm Implements and Machinery Testing and Training Centre (FIMTTC), Bikaner in 2011. The establishment of this centre is to improve the quality of manufacturing as per the standards of the Bureau of Indian Standards (BIS). The Centre was accredited by the Division of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India, New Delhi on July 14, 2012, vide Addendum No. 8-1/2004 MY(I&P) dated July 09, 2012 testing. The centre, apart from facilitating testing of farm machinery equipment, is also providing training to students, farmers, and other stakeholders. Since its inception, it has released 1102 Commercial Test Reports catered to the demand of more than 14 states of the country generating revenue of 12 crore 30 lakh.

### **Monitoring Mechanism**

The University is currently following the VI<sup>th</sup> Deans Committee recommendations in teaching programmes. A comprehensive curriculum monitoring mechanism is being taken up by the Deans and Director of the respective teaching units of the University. The Faculty Chairman, Board of Studies, and Academic Council further look into the monitoring mechanism of the curriculum. Both internal and external evaluation methods are involved in the evaluation of the performance of students. The external examination system is followed for theory and practical examination for all courses. In case of any grievance reported by the students, the Controller of Examinations (CoE) reviews the examination papers at the University level, followed by recommendations of the Deans/Director. CCTV cameras are installed by the authority in the classrooms to monitor the teachers as well as the students' activities. Every year, the Annual Performance Appraisal Report (APAR) is being filled up by teaching faculty which is duly checked and forwarded through respective in-charges to the University administration. The attendance of the University staff is maintained by a biometric system which is reported to the Governor's office as and when required. Regularity of students in classes and daily lectures are also reported to the head of the respective institutions and further furnished Management to the Governor House, Jaipur.

### **Internal Quality Assurance Cell (IQAC) in DPM&E:**

Directorate of Prioritization, Monitoring, and Evaluation was established in the year 1992, with the objective to plan and monitor education, research extension activities, human resource, finance/etc. Directorate of Prioritization, Monitoring, and Evaluation is

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responsible for exploring and establishing the priorities, monitor ongoing activities, and evaluating the complete activities of the university. The Directorate is responsible for coordinating all the units of the university in terms of seeking information compilation and preparation of various types of university documents viz annual reports, monthly reports, periodicals, newsletters, etc. periodically for furnishing to ICAR and its institutes. Government of Rajasthan, Governor of Rajasthan, various agricultural universities across the state, and all academic and concerned units at the national level. The directorate also caters to the ranking of universities at the National level. It also furnishes information pertaining to the Central and State Govt. along with other agencies and organizations. PM&E is responsible for the overall report compilation of the activities of the university periodically

Besides this, the PME cell of the Directorate of Research takes overall charge of the identification of thrust areas of research, drawing upon research priorities of the university for short listing priority researchable problems across crops/divisions/programme, commodities, etc. at the university level, coordinate and arrange for annual monitoring of each ongoing and completed research projects, coordinate and synthesize the recommendations of QRT, RAC, IRC, etc. It maintains a database of all publications and technologies developed. An Internal Quality Assurance Cell (IQAC) was established at university level to develop a system for conscious, consistent, and catalytic improvement in the overall performance of institute.

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# Institutional Strategic Goals

The Mandate of SKRAU is imparting education in Agriculture, Agri-business Management and Community Sciences. The second mandate is conducting research for development of new technology & varietal development suitable for arid climate of Rajasthan State. Last but not the least, the mandate of SKRAU is dissemination of new technology through KVKs to the farmers so that income of farmers can be enhanced. The Road Map for Growth & Development of Agriculture in the State through Education, Research & Extension is outlined as under;

## Teaching:

**Imparting education and human-resource development:** Enhancing quality of human resource is pre-requisite for implementing and upgrading research programmes, developing technologies, evolving institutional arrangement to face challenges and harness opportunities. Efforts will be made to develop state-of-the art infrastructure and to enhance faculty competence for improving higher education in agriculture & allied disciplines. Existing part of talented human resource & infrastructure would be utilized to evolve globally competition innovation agricultural university.

The focus of the Master's and Doctoral Research will be as follows:

- Application of Nano-technology in Agriculture
- Application of Remote Sensing Technology
- Focus on Precision Agriculture
- Focus on Low Tunnel Technology under protected cultivation
- Application of Post-Harvest Technology and value addition in arid crops
- Focus on organic horticulture
- Economic feasibility of arid fruit based cropping system
- Focus on mass production of Bio agents in arid zone
- Testing of fungicides with bio agents
- Promoting Mushroom cultivation
- Initiating research on tissue culture
- Promoting farmers participatory seed production
- Initiating climate resilient smart breeding programmes
- Focus on breeding Abiotic stress tolerant crops
- Micro propagation of arid fruit plants
- Focus on Molecular analysis of genes of agricultural importance
- Develop innovative bio technological solutions for various challenges in agricultural sector
- Undertake pioneering research in genetic engineering, genomics and bio informatics

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- Focus on integrated pest management technology for major insect-pest under open as well as protected cultivation
  - Residue analysis of insecticides in arid crops
  - Focus on integrated nutrient management for sustainability
  - Using STCR approach for precise nutrient management
  - Role of soil microbes for enhancing productivity
  - Focus on recycling of organic wastes for sustainable agriculture
  - Focus on use of poor quality water through conjunctive use
  - Reclamation of salt affected soils
  - Focus on soil carbon sequestration in enhancing the soil productivity

## Research

- **Introduction of new crops in cropping system:** The main benefits of the introduction of new species and varieties are higher crop yields and incomes of farmers due to the better adaptability of the crops to the environment in which they are grown and the increased resilience of cropping systems to climate-related risks.
- **Research on post-harvest management and processing of fruits & vegetables:** There is great scope for developing high value products from the indigenous crops. In order to generate appropriate technologies for post harvest management, government interventions through policy directions are needed. Promoting establishment of processing units in production centers based on cluster village concept to process excess produce for export is required.
- **Introducing drone technology for production and protection:** Drones are being used to assess crop damage, spray pesticides and fertilizers and tackle locust onslaughts. Depending on the purpose, a drone can be mounted with either a spraying mechanism along with a container or sensors for mapping crops.
- **Focus on protected agriculture with automation:** Farm automation practices can make agriculture more profitable while also reducing the ecological footprint of farming at the same time. Site-specific application software can reduce the amount of pesticides and fertilizer use while reducing greenhouse gas emissions. This farming technology is intended to alleviate the labor-intensive and time-consuming agricultural operations that farmers all over the world face. The selective automation for crop production would be developed to make farming more energy and labour efficient, gender and ergonomically responsive. Power machinery management protocols will be developed as a linkage between manufacturer, service provider and user for different levels of farming.

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• **Research on Watershed management / moisture conservation:** Watershed management is to conserve the soil, plant, and water resources of a catchment for benefiting humanity. All environmental, social, and economic concerns are combined to treat watersheds in an integrated manner.

• **Research on renewable energy / power generation:** If successful, these technologies can help us reduce our reliance on fossil fuels, which would help mitigate climate change. They can also help us improve air quality and create new jobs in the renewable energy sector. Solar wind energy based cost effective models for powering farm equipment/sensors/ pumps will be developed for both open field and protected farming conditions.

• **Development of climatic resilient production technologies:** Climate change will have diverse implications in different agro ecosystems through impact on agriculture, water resources, forestry & biodiversity, energy and infrastructure. Elevated temperatures in hot arid region are most likely to have adverse impact on crop and livestock productivity that need to be addressed through an array of selection, breeding and management strategies.

• **Research on medicinal and aromatic plants:** Medicinal plants are considered as a rich resource of ingredients which can be used in drug development either pharmacopoeial, non-pharmacopoeial or synthetic drugs. One of the huge benefits from medicinal and aromatic plants is to overcome many illnesses, such as contagious disease, cancer and AIDS/HIV.

• **Drip irrigation and fertigation scheduling for different commercial, fruit and vegetables crops:** Fertigation through drip irrigation reduces the wastage of water and chemical fertilizers, optimizes the nutrient use by applying them at critical stages and at proper place and time, which finally increases water and nutrient use efficiency.

• **Low tunnel technology for winter vegetables:** Low tunnel technology protects plants from severe weather conditions, like strong wind, rain, snow, etc. Carbon dioxide is trapped within such tunnels which help in enhancing photosynthesis in plants. Through low tunnel farmer get early plant produce and earn more prices in market.

• **Work on moisture conservation technology:** To avoid the yield loss and to maintain crop stand with optimum yield, some effective soil moisture conservation techniques like mulching, deep tillage, compartmental bunding and basin listing are to be adopted for successful crop production. be developed to make agriculture not only a livelihood but also a resource generating venture. It will focus on aspects like protecting soil from erosion, nutrient depletion, structural breakdown and promotion of biodiversity by growing a variety of field crops as well as horticultural crops rather than monoculture of commercial crops. Efforts will also be made to introduce organic agricultural approaches like, biodegradation, organic management and bioremediation, ensuring soil health through maintenance of soil biota and making it acceptable in terms of level of fertility without compromising yield potential. Zero budget natural farming will be promoted for reducing external inorganic inputs on the basis of soil and water quality analysis.

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• **Focus on integrated farming system research:** The main purpose of integrated farming is to make farming components support one another, hence, reducing external inputs.

• **Development of high yielding, biotic and abiotic stress tolerant and bio fortified varieties of various crops of the Zone:** Biotic factors like insects, rodents, pests, etc. spread the disease and reduce crop production. Abiotic factors like humidity, temperature, moisture, wind, rain and flood destroy the crop raised. Biotechnology can be used to increase the yield of food crops by improving biotic and abiotic stress tolerance.

• **Precision farming using remote sensing technology:** Balancing the inputs and outputs of physical as well as biological resources on a farm is fundamental to its success and profitability. Since the human eye has a very limited vision, the resource degeneration occurring at another place may not be visible which may eventually lead to the worse condition at the same place. Thus, it becomes imperative to have as much broad and holistic vision to manage the natural resources and it is here that GIS and remote sensing enables us to visualize and analyze agricultural environments to benefit the farming community, industry as well as the nature itself. By incorporating GIS into standard farming practices, farmers, researchers, and consultants have been able to improve the precision of existing agronomic management activities by implementing them at a subfield scale.

• **Studies on crop residue management:** Agricultural residue include rice straw, wheat straw, rice husk, and corn stover, which are mostly left on the fields after harvests and used for fodder and landfill material or burnt in many places. These residues are used for animal feed, soil mulching, manuring, roof thatching and fuel purposes. A large portion is burnt on-farm for timely clearance of fields for sowing of the next crop. Burning of crop residues not only causes environmental pollution adding to global warming but also results in depletion of valuable nutrients like N, P, K and S.

## **Extension**

• **Strengthening Agricultural Technology Information Center (ATIC) :** This project has been sanctioned in 1999 under the National Agricultural Technology Project. ATIC is functioning as 'single window delivery system' for meeting the requirements of the farmers in terms of new technology, seeds/planting material of improved varieties, diagnostic facility, literature, which will be quite innovative and would help in bringing the institutions/SAUs closer to the farmers.

• **Organizing Scientific Advisory Committee (SAC) Meetings:** As per the guidelines of the ICAR, SAC is constituted at every KVK for assessing, reviewing and guiding various activities of the center. The members of this committee comprises of a cross section of scientific, farming community, representatives of both government (GO) and non-government organizations (NGO) who are directly or indirectly involved in the process of agricultural training, production and development. In each meeting, the progress report of

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previous year and the annual action plan for the ensuing year will be presented by the Senior Scientist and Head along with some outstanding contributions and activities taken up within the operational area of KVK.

- **Fixing Seed Production target for KVKs:** Details of seed production programme at KVKs farm: Seed production programme at KVKs farm of kharif crops viz. groundnut, mothbean, clusterbean and cowpea etc. 25380 q and Rabi crops mustard, wheat, barley, chickpea, fenugreek of spices crops etc. 70965 q Breeder Seed, Foundation Seed, Certified Seed & Truth Full Level seed will be produced as per targets set by the university.

- **Conducting Training courses for field functionaries:** The KVKs have been entrusted with the responsibility of conducting training of grass root level field functionaries like agricultural supervisors (VLWs), anganwadi workers and secretaries of Gram Seva Sahkari Samiti etc. working in government and non- government organizations. These training programmes will be arranged in collaboration with the concerned line departments. Training programmes will be organized by KVKs with the participation of field functionaries for the farmers.

- **Sponsor trainings for Rural Youth:** The ASCI (Agricultural Skill Council of India) in its endeavor to develop skills of Indian agriculture and allied workforce in collaboration with the key stakeholders including SAUs has signed MoU with 22 universities. MoU was also signed between ASCI and SKRAU, Bikaner. In this context, seven KVKs will organize training programmes on quality seed grower, assistant gardener, dairy farmer/ entrepreneur, small poultry farmer, mushroom production and on nursery worker and other need based trainings as per sanction by ASCI.

- **Diploma Programme in Ag. Extension Services for Input Dealers (DAESI):** One year Diploma in Ag. Extension Services for Input Dealers (DAESI) programme will be organized as per sanction MANAGE, Hyderabad. Under this programme contact classes will be arranged on every Sunday at KVK, campus.

- **Fixing targets for Frontline Demonstrations (FLDs) on farmers' fields Cluster Front line Demonstrations:** The ICAR has sponsored a special programme of Cluster Front-line Demonstrations to demonstrate the genetic production potential of improved crop varieties and to disseminate latest proven technologies of oilseeds under NMOOP scheme and pulses production among the farmers with the view to reduce the time lag between technology generated and its adoption under NFSM scheme. This will also enable field functionaries to elucidate the production constraints and limitations in the adoption of technology for onward transmission to scientists to reorient their research accordingly. In these demonstrations all the newly unfolded technologies are carried out under the direct supervision of scientists and technicians of KVKs by supplying the critical inputs. Demonstrations (FLDs) will be conducted after approval of ICAR ATARI, Jodhpur for oilseeds, pulses and other crops.

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- **Fixing targets for Demonstration on other enterprises (as per allotment by ICAR-ATARI, Jodhpur):** KVKs will also conduct demonstrations on fodder production, plant protection measures vegetable production and animal production.

- **On Farm Testing (OFT):** To identify suitable solutions of the location specific problems being faced by the farmers in the adopted villages, On Farm Testing (OFT) programme will be taken up by KVKs on problems like low yield, plant protection, nutrient management and varietal assessment in crops like cluster bean, moth bean, green gram, groundnut, wheat, mustard, gram and vegetables like carrot and onion. OFTs will also be taken on fruit plant like kinnow, pomegranate and date-palm. In animal husbandry section, buffalo and cattle will be taken into consideration.

- **Activities under knowledge resource management:** Documentation of available knowledge through literature development for benefit of farming and scientific community as well as for extension functionaries is one of the important activities of KVK. Lectures by scientists in various meetings, trainings, and seminars etc., telephonic contact and Whatsapp groups with farmers will be the other ways of knowledge management.

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# Institutional Development Plan (IDP)

The main focus of IDP will be as under:

## **A. Academic Excellence:**

We have developed strategies to enhance academic quality, curriculum innovation, teaching excellence, and student learning outcomes. This includes faculty development initiatives, curriculum redesign, accreditation efforts, and quality assurance mechanisms. We have credit and semester system (CSS), Board of Studies, Academic Council, Board of Management for approving policies related to academic excellence.

## **B. Research and Innovation:**

The research wing of a university, headed by a director, serves as a pivotal hub for advancing the institution's research agenda, fostering innovation, and contributing to academic excellence. Here's a description of the key components and responsibilities typically associated with such a role:

- **Leadership and Vision:** The research wing provides strategic leadership and vision for the research activities of the university. They set clear goals, priorities, and objectives aligned with the institution's mission and strategic plan.
- **Research Strategy and Planning:** Develop and implement a comprehensive research strategy and plan that outlines the priorities, focus areas, and targets for research initiatives. This includes identifying emerging research trends, fostering interdisciplinary collaboration, and promoting a vibrant research culture across the university.
- **Resource Allocation:** Oversee the allocation of resources, including funding, facilities, and personnel, to support research activities. They work closely with funding agencies, donors, and stakeholders to secure research grants, contracts, and other sources of funding to support faculty research projects and initiatives.
- **Faculty Support and Development:** Provide support and guidance to faculty members engaged in research activities. This may involve facilitating research collaborations, providing mentorship and professional development opportunities, and assisting with research grants and research proposal development.
- **Infrastructure and Facilities:** Ensure efficiency in managing and maintaining research infrastructure and facilities, such as research centres, and specialized equipment. He ensures that these facilities meet the needs of faculty researchers and comply with relevant safety and regulatory standards.
- **Partnerships and Collaborations:** Foster partnerships and collaborations with external

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organizations, industry partners, government agencies, and other universities to enhance research opportunities and maximize the impact of research outcomes. This may involve establishing research consortia, joint research projects, and technology transfer agreements.

- **Ethics and Compliance:** Ensure that research activities adhere to ethical standards, regulatory requirements, and institutional policies. The Director oversees the research ethics review process, promote responsible conduct of research, and address any compliance issues or concerns.
- **Research Output and Impact:** Monitoring and Evaluation of the research output and impact of the university's research activities. This includes tracking publications, patents, citations, and other metrics of research productivity and impact, and communicating these achievements to internal and external stakeholders.  
Foster a culture of research, scholarship, and innovation by investing in research infrastructure, supporting faculty research initiatives, promoting interdisciplinary collaboration, and facilitating technology transfer and commercialization activities.
- **Technology Integration:** Integrate technology into teaching, learning, and administrative processes to enhance efficiency, accessibility, and innovation. This may involve upgrading IT infrastructure, implementing learning management systems, and promoting digital literacy among faculty, staff, and students.
- **Community Engagement and Partnerships:** Strengthen partnerships with local communities, industry partners, government agencies, and other stakeholders to address societal needs, promote economic development, and enrich the university's academic and research programs.
- **Financial Sustainability:** Develop strategies to ensure the financial sustainability of the university through diversified revenue streams, efficient resource allocation, fundraising efforts, and prudent financial management practices.
- **Governance and Leadership:** Enhance institutional governance structures, leadership development programs, and accountability mechanisms to promote transparency, integrity, and effective decision-making.
- **Monitoring and Evaluation:** Establish mechanisms for monitoring progress, evaluating outcomes, and revising strategies as needed to ensure the successful implementation of the institution development plan.

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# Strength, Weakness, Opportunity and Challenges (SWOC)

University has taken up identification of SWOC on a periodic basis and work on reviewing the same. Based on the analysis following strengths have been identified:

## Strengths

**1. Reputation and Accreditation:** SKRAU is reputed university where students seek admission from all over India. It is accredited by ICAR, thus, enhancing its credibility and attracting quality students.

**2. Experienced Faculty:** University faculty has substantial academic qualifications providing valuable insights and mentorship to students.

**3. Industry Linkages:** University has established partnerships with agribusiness industry facilitating internships, job placements, and collaborative research opportunities.

**4. Curriculum Relevance:** The curriculum is regularly updated to reflect current industry trends which ensures that students are well-prepared for the job market. Industry people have representation in Board of Studies. PG and Ph.D. syllabi have been revised in 2021 as per BSMA committee report as per ICAR norms. Sixth Dean's Committee report for revising UG syllabus has been implemented in 2024.

**5. Smart Academic Infrastructure:** The University has smart classrooms fully equipped with digital screens for effective teaching. There is lecture capture technology in classrooms provided by ICAR.

**6. Strong Alumni Network:** Different constituent colleges have established strong, and collaborative alumni network that can provide mentorship, job placements, and feedback on curriculum relevance.

## 7. High Class Infrastructural Facilities:

- Library (with modern facilities to access e resources and RFID system)
- Hostel Boys – 08
- Hostel Girls- 04
- International Hostel- 01
- Examination Halls in all constituent colleges
- Entrepreneurship cell
- Audio and Video recording lab
- Sports & Recreation Facilities
- Common Lecture Complex facility with Auditorium
- Career Counselling and Placement Cell

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## 8. ICT Applications in curricula delivery:

1. **Use of smart classroom Classrooms are equipped with latest technologies.** All classrooms have smart facilities. From last many years, all teaching faculty members are using ICT enabled teaching material and practical manuals
  2. **E resources:**
    - a) Academic Management Software, Blended learning system EBSCO, CeRA, KOHA library software operating on OPAC system, Indiatat, Krishi Kosh, Shodh Ganga and Shodh Gangotri (INFLIBNET).
    - b) Language Lab: Macmillan English campus is the English language learning platform which provides students with on-demand language practice and teachers with flexible materials and courses was used to develop the English language proficiency
    - c) Online research databases, e-journals, magazine subscriptions, ebooks and discovery service for academic libraries like EBSCO and statistical databases on indiatat is used for research and project work
  3. Anti plagiarism software is used compulsorily for project and seminar submissions to avoid unintentional plagiarism and embrace the confidence of submitting 100% original work.
  4. Video audio recording room is used for developing pre recorded lectures by the faculty members.
  5. Video conferencing facility for online guest lectures and placement activities. Recorded lectures are uploaded on youtube channels and blogs developed by the faculty members to train the students in recent statistical tools like R, Flex dashboards etc. Websites, blogs and podcast are also developed by each student as practical assignments to develop their digital communication skills
9. **Placement Cell:** The University has a placement cell which ensures employability of students. IABM, a constituent college has 100 percent placement record.
10. **Patents obtained in SKRAU:** The University has obtained 15 patents of designs of new technologies from Govt. of India, Germany and UK.
11. **ISO Certificates:** The constituent colleges of SKRAU have obtained ISO certificates for various laboratories. The KVKs of SKRAU have also obtained ISO certificates.
12. **Gymnasium, Stadium having outdoor and indoor games facilities:** The SKRAU has outdoor game facilities for Cricket, Athletics, Volleyball & Basketball. The University also has indoor game facilities for Badminton, Table tennis, Carrom & Chess. Besides this, the University has Gym facilities at central level and each hostel (Boys & Girls) also has Gym facilities for the students.

**13. Yoga and Naturopathy Center:** The University has Yoga and Naturopathy Center for the employees and students for maintaining good health.

**14. Ayushman Aarogya Mandir (University Hospital):** It provides basic health facilities for Staff, Students and Campus residents.

**15. Sale outlet “Apno Bazar”:** The University maintains “Apno Bazar” for the products produced by various units in the university like Vermicompost, Nursery plants and Saplings, Bajra products viz Cakes, Cookies, Muffin, Puffs etc. The sale outlet also promotes products developed by women SHG of adopted village.

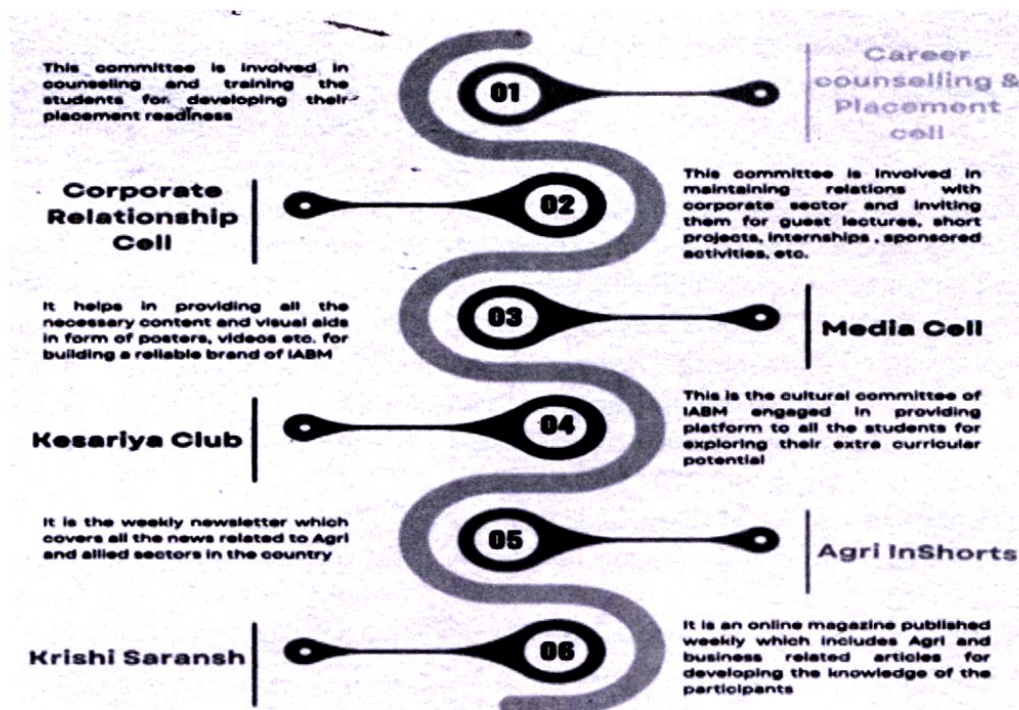
**16. IGNOU Center for Distance Learning Courses:** The University has IGNOU Center for Distance Learning Courses for promoting skill development among rural youth.

**17. Media Cell at University Level:** The University has Media Cell operated by PRO which ensures university's presence on Facebook, Twitter and Instagram.

**18. Clubs and Committees:**

**Strong Online Presence:**

- Online classes with Learning Management System
- Online webinars and sessions by agri business industry experts



- National level online Business plan competition, 'The Next Seed'
- Agri startups sessions - 'Let's Talk Professional' series
- Alumni interaction sessions- 'Connecting the Dots...'
- e- magazine- Agri Inshorts, Krishi Saransh
- Kesaria- Cultural Club

**20. Radio Frequency Identification (RFID):** Library Management by RFID System, information resources viz., CeRA, Krishi Kosh.

## **21. Centre for Information Management and Computer Applications (CIMCA)**

The centre came into existence with the establishment of Agricultural Research Information System (ARIS) by ICAR, New Delhi in 1996. A major advancement took place when the ARIS was transformed into Centre for Information Management and Computer Applications (CIMCA) and provision of RAU (Rajasthan Agricultural University) Local Area Network (LAN).

The centre caters to the Local Area Network (LAN) and Wide Area Network (WAN) with 250 nodes in all buildings of the university campus by 1 GBPs Leased Line. It also provides e-communication and e-regulation of academic dimensions and e-governance of resource administration of SKRAU, Bikaner. Following are the regular activities being taken care of by this centre:

- Salary, PF and Welfare Loan related work.
- Maintaining computer hardware and software in the university offices.
- Intercom facility (IP Based) with the support of OFC in all unit heads in Bikaner Campus
- Receiving grievances and uploading replies on Rajasthan Sampark Portal.
- Uploading data of regular and retired employees of this university regarding RGHS.
- Uploading data of regular employees of this university regarding IPR.

The centre is also maintaining and updating University Website ([www.raubikaner.org](http://www.raubikaner.org)) on regular basis. Following new features have been added on the university website:

- CMS of Winter/Summer School online applications.
- Provision of Screen Reader Access Compability and Font Management System.
- Link of Hindi Masik Patra "*CHOKHI KHETI*".
- Link of Subject wise list of accredited teachers of Ph.D. Program.
- Link of Rajbhawan
- Link of IUMS
- Link of Agro Advisory and Weather Forecast.
- Link of University Grant Commission (UGC)

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**22. Farm Implements and Machinery Testing and Training Centre (FIMTTC):** The Central Workshop got a major boom when FIMTTC was started under RKVY at this location with the following objectives –

- Check material specifications, durability and reliability of the farm equipments
- Assess the functional performance such as quality, output and energy/power requirement of the farm equipments
- Maintain the quality of farm machinery being subsidized by the Government
- Suggest modifications and improvements on the basis of test results and feedback from farmers for better performance, ease in handling and adjustment
- Impart training on different types of farm equipments to farmers, small scale manufacturers and extension workers
- Help farmers in determining the comparative performance of farm machinery available in the market.

The centre got accredited by the Division of Agriculture & Cooperation, Ministry of Agriculture and Farmers' Welfare, GoI, New Delhi vide Addendum No. 8-1/2004-MY (I&P) dated July 09, 2012.

**23. Agricultural Research Stations in different climatic zones:** There are two ARS, one at Sri Ganganagar and Bikaner and one ARSS at Hanumangarh.

**24. Krishi Vigyan Kendras in different districts under jurisdiction of university:** The Directorate of Extension Education looks after extension activities through 7 KVKs located in 5 districts under jurisdiction of university namely; Bikaner, Lunkarnsar, Chandgothi, Abusar (Jhunjhunu), Padampur, Pokhran, and Jaisalmer

**25. National Seed Project:** ICAR National Seed Project is functioning right from establishment of the University in 1987 with its three components viz., National Seed Project (NSP), Breeder Seed Project (BSP) and Seed Testing Research (STR). After division of the University in 2013, two components NSP and BSP are functioning with SKRAU, Bikaner and STR is functioning at SKNAU- RARI, Durgapura, Jaipur.

**26. Seed Hubs at different Agricultural Research Stations to cater to farmer's needs:** Three Seed hubs at ARS Sri Ganganagar, NSP Bikaner and KVK Jhunjhunu are functioning.

**27. Bakery Unit for value addition of Pearl millet:** The pearl millet value added products like biscuits, muffins, cakes, flakes, and khakras are produced.

**28. Nursery:** Quality planting materials of important plants of arid ecosystems are produced and supplied for revenue generations.

**29. Experiential Learning Units (ELU) in different constituent colleges:** ELUs Like

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micro propagation of plants, Mushroom production, mass production of Bio agents, vermicompost, textile and apparel designing and EECM.

**30. Datepalm Research Centre:** It was established in 1979 to propagate and popularize various datepalm varieties.

**31. Agro Meteorology Observatory:** There are two Agro Meteorology Observatories at Bikaner and Jaisalmer to give advisories to farmers.

**32. Mushroom Production Centre:** It provides regular trainings to farmers and budding entrepreneurs and helps in establishing the mushroom units.

### **Weaknesses:**

Alongside our strengths, University is fully aware of its weaknesses in terms of carrying out Strategic Plans and achieving the Quality Mandate. SWOC analysis revealed the following weaknesses:

- 1. Limited Resources:** The University faces constraints in funding and manpower resources, affecting research capabilities, regular academic activities and infrastructure development due to difficulty in obtaining government sanctions.
- 2. Lack of upgrade in infrastructure:** The University needs huge infrastructure and digital facilities to cater to the stakeholders in a better way. This requires huge funding either from ICAR or Government of Rajasthan which is not forthcoming.
- 3. Shortage in Faculty:** There is faculty shortage due to a smaller number of sanctioned teaching posts in many departments as compared to the pyramid faculty structure as envisaged by ICAR.
- 4. Low Gross Enrolment Ratio(GER):** Inability to increase the critical mass of students despite huge demand ratio due to inadequate teachers/technical staff/physical infrastructure.
- 5. Limitations in Digital Infrastructure:** There is huge requirement in digital infrastructure requirements which is so integral in overcoming the digital divide among students.
- 6. Paucity of Funds:** Being a public University, due to paucity of funds University is not able to support high end publication costs in reputed national and international journals through open access mode, reducing the visibility of the publications and thereby affecting citation and h-index.

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**7. Limited faculty/ student exchange programmes:** Opportunities for international faculty/student exchange in University are limited due to financial constraints.

**8. Constraints in Project Funding:** There is dependence on government funding, which limits R&D activities of the university. As a State autonomous University, it is obligated to abide by the stringent Acts, Statutes, Ordinances, Government Rules Regulations, thereby creating inadvertent delay in the implementation of projects.

A critical appraisal of its weaknesses helps the University in overcoming them and charting new innovative/remedial measures.

### **Opportunities:**

Opportunities identified from SWOC are as follows :

- 1. Online Education Trends:** The rise of blended learning platforms (BLP) can allow the university to reach a broader audience, offering flexible learning options.
- 2. Government Initiatives:** Government policies supporting agricultural innovation and entrepreneurship can lead to increased funding and collaboration opportunities. Recently university is looking for MOU with DOITC Jaipur which is likely to open the Accelerator Centre of DOITC flagship venture 'i start' in SKRAU Bikaner to promote entrepreneurship so that budding talent in agribusiness can become job providers, not the job seekers.
- 3. International Collaborations:** MOU with foreign universities can enhance and attract international students. The university has MOU with ICSSR through which foreign students are admitted.
- 4. Increasing Enrolment for Online Courses:** When program experiences a steady increase in student enrolment due to positive word-of-mouth and successful marketing campaigns, we can leverage online platform to provide online courses for the students.
- 5. Curriculum Enhancement:** There is scope for updated curriculum enhancement based on industry needs by incorporating new subjects like digital agriculture, AI in agriculture and sustainable agriculture practices.
- 6. Faculty Expansion:** Inviting adjunct professors/ professor of practice with diverse backgrounds in agribusiness, agricultural sciences and industry to support the growing student enrolment.
- 7. Climate Change Adaptation:** With global concerns around climate change, agriculture universities have an opportunity to lead in research on climate- resilient agriculture.
- 8. Carbon Farming and Carbon Credits:** Research in carbon sequestration in agriculture and its integration into carbon credit markets could be a key area for growth.
- 9. Emphasis on Precision Agriculture and Innovation in Agri-Tech:** It employs farming methods that use technology to improve crop yields and environmental protection. This is a kind of smart farming which uses technology like green houses, low tunnel

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technology and drones. There is a growing demand for technology-driven solutions in agriculture, such as drones, AI, and IoT for precision farming. SKRAU can capitalize on this trend by developing programs and research to foster innovation.

**10. Public-Private Partnerships:** SKRAU can partner with private companies, NGOs, and government agencies to tackle real-world agricultural issues, gain funding, and improve relevance.

**11. Consultancy & Advisory Services:** Offering consulting services to farmers, agribusinesses, and policy makers can generate a significant revenue stream and enhance the outreach of the university to make impact.

**12. Taking Lead in Global Food Security Initiatives:** Increasing demand for food production worldwide opens opportunities for agricultural university to lead in research for improving yields and food security by resorting to climate resilient agriculture to check the food shortages in developing regions.

**13. Eminent Institutional Collaborations:** The University can have MOUs with institutes of national and international fame to make positive contribution and enhance university visibility. University's research and library resources could be used with synergy in a collaborative mode, advantageously pooling resources for attainment of global excellence, in tune with NEP 2020.

**14. A Hand for Stakeholders:** University offers to each of its stakeholders an opportunity of exposure to a continually up-scaling, up-grading, up-rising and up-right environment of learning through novel academic & research paradigms.

**15. Transforming for the Times:** Sensitive to the ever changing needs of swiftly growing economy, emerging service sector, University has the opportunity to equip itself in designing inventive need based academic programmes.

**16. Tapping illustrious university alumni:** There is an opportunity to tap illustrious alumni straddling diverse fields for University's flight to new horizons of excellence.

### **Challenges:**

**1. Intense Competition:** The emergence of new private educational institutions offering similar programs can dilute market share. The university will have to acquire competitive edge for maintaining its reputation.

**2. Technological Changes:** Rapid technological advancements in agriculture require constant digital upgrading to remain relevant.

**3. Research Initiatives:** The University will encourage faculty-led research projects that address current challenges in agriculture, hence positioning the university as a thought leader.

**4. Diverse Offerings:** Introduction of specialized courses or certifications in emerging

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areas such as precision agri-tech, sustainable farming practices, AI in agriculture, and machine learning.

**5. Transforming to the Blended Mode:** It is a big challenge to provide anytime, anywhere learning in response to the requirements of a rising Gig Economy which necessitates the availability of world class digital infrastructure.

**6. Fostering High End Industrial Collaborations:** Promoting patents of the new technology acquired by the university for technology transfer ensuring meaningful applications and products for commercialization. Impending financial, statutory, and legal implications impose a challenge here.

**7. Insufficient Government (ICAR and State) investment in higher education:** There is inadequate financial resources for research infrastructure. Despite decreasing Government support for focused investment in State-of-the-Art laboratory with sophisticated equipment and facilities, University struggles to meet such ends in the interest of higher academic goals.

**8. Lack of Modernization:** Inability to implement timely modernization and professionalization of Governance in tune with global benchmarks creates competitive disadvantages for the university.

**9. Impact of Extreme Weather:** University may be vulnerable to the effects of extreme weather events (e.g. droughts, Increased temperature, and other parameters of climate change), which could disrupt research operations.

**10. University Social Responsibility (USR):** The University is adopting villages to transform them into model village by providing logistic support, developing SHGs of the rural women and linking them with the banks for promoting their venture. The biggest challenge encountered by the University is that such indices of developing model villages remain less accounted in today's material-driven world.

## विश्वविद्यालय कुल गीत

धोरों की धरती पर स्वप्निल हरियाली बिछ आई है  
मरूधर की काशी पर हमने इक नव पौध लगाई है  
सन्त केशवानन्द के आदर्शों को हृदय बसाया है  
सृजन बीज बोकर हमने धरती का कर्ज चुकाया है

हमारा केशवानन्द कृषि विश्वविद्यालय  
रेतीले धोरों से हमने गुण अंबार निकाले हैं  
कल के सूखे रेत के टीबे, अब दिखाते हरियाले हैं  
संवर्धित की हमने किस्मे, मोठ, बाजरा, ग्वार की  
बेर खेजड़ी मूंगफली और किन्नु संग अनार की  
जौ, कपास और चना गेहूं का, उत्पादन बढ़ पाया है  
सृजन बीज बोकर हमने धरती का कर्ज चुकाया है

हमारा केशवानन्द कृषि विश्वविद्यालय  
आधुनिक के साथ पुरातन, प्रकृति के हम सैनिक हैं  
कृषि कार्य के यंत्र बनाने की तकनीक भी मौलिक हैं  
ऊँट, भेड़, मधुमक्खी, मछली, गाय, भैंस का पालन हो  
उन्नत हो तकनीक हमारी, सुगम कृषक का जीवन हो  
नवाचार का हुनर किसानों को हमने सिखलाया है  
सृजन बीज बोकर हमने धरती का कर्ज चुकाया है

हमारा केशवानन्द कृषि विश्वविद्यालय  
इन्दिरा भाखड़ा गंग के जल से, शस्य श्यामला हुई धरा  
केशव की शिक्षा ज्योत से जन - मन में आलोक भरा  
कृषि प्रबन्धन श्रेष्ठ किया और शोध ज्ञान का हुआ प्रसार  
जैविक खेती, नारी शिक्षा ने भी तो पाया विस्तार  
सेवा और स्वावलम्बन का नव इतिहास रचाया है  
सृजन बीज बोकर हमने धरती का कर्ज चुकाया है

हमारा केशवानन्द कृषि विश्वविद्यालय



उत्तमा वृत्तिस्तु कृशिकर्मव

स्वामी केशवानन्द राजस्थान कृषि विश्वविद्यालय

स्वामी केशवानन्द  
राजस्थान कृषि विश्वविद्यालय  
बीकानेर