# **EDUCATION**









#### 3.1 General

The concept of education is based on two-tier system. The first one consists of the higher education covering Agriculture, Horticulture, Agricultural Engineering & Technology and Agri-Business Management which includes graduate and post graduate resident instruction programmes as well as polytechnic diploma programmes. The second consists of lower education programme provided at the School of Baking, Agro-based ITI and Extension Education Training Centres. The higher education programmes are looked after by the Deans and Registrar, while lower education programmes by the Director of Extension Education at the university level. The details for the eightteenth annual report are presented herewith.

As per the notification No. GKV-201516-GOI-II-K-2 (Part-III) dated: 28/09/2020 from Government of Gujarat, all the UG, PG and polytechnic programmes related to Fisheries Science, Veterinary Science and Anima Husbandary were allotted to Kamdhenu University, Gandhinagar from the academic year 2020-21.

#### 3.2 Under Graduate Education

The under graduate programmes are of duration of 4 years (8 semester) in various faculties with residential faculties.

#### (1) Procedure of Admission

The admission criteria in the Under Graduate programmes in Junagadh Agricultural University is purely on merit basis considering weightage of 60% marks obtained in science subjects of Physics, Chemistry and Biology/ Mathematics at HSCE and 40 % marks obtained in Gujarat Common Entrance Test (GUJCET) conducted by GSEB for all courses. English is a compulsory subject for all the under graduate programmes. The students passed science subjects with vocational stream may also be admitted. For admission to B.Sc. (Hons.) Agri., B.Sc. (Hons.) Horti., Physics, Chemistry and Biology, while for

B.Tech. (Agril. Engg.), Physics, Chemistry and Mathematics subjects are compulsory. Among the seats allotted for admission, 49% seats are reserved for various Backward Classes, i.e. 15% for Schedule Tribes, 7% for Schedule Caste, 27% for Socially and Educationally Backward Communities as declared under Baxi Commission (Mandal Panch) and additional 10% seats for EWS are reserved as a supernumerary as per reservation policy. One per cent of available seats are reserved for children of defence personnel and ex-servicemen. Moreover, 5% seats are reserved for PWD (Divyang) candidates as per the directives from the Supreme Court of India. The students of CBSE, who have passed their examination from school located in Gujarat State, are admitted as per *prorata* basis. There is provision of additional seats for Kashmiri Migrants and Parsi Community (domicile of Gujarat State) also. Out of state quota, 15% seats are reserved in UG for out of state candidates, who have been nominated by ICAR. At the university level, the Registrar centrally administers the admission procedure in Agriculture, Horticulture and Agricultural Engineering.

Weightage of marks for participation in sport is given in admission as per the rank obtained in various sports activities. Weightage of 5% marks is given to farmer's son/daughter and students of vocational stream who have passed HSCE with Agriculture subject in addition to Physics, Chemistry and Biology for admission to B.Sc. (Hons.) Agri. and B.Sc. (Hons.) Horti. degree course. Apart from this 15% of intake are admitted through ICAR.

All the four Agricultural Universities of Gujarat for all UG programmes adopt centralised online admission procedure.

### (2) Academic Programmes offered at UG level

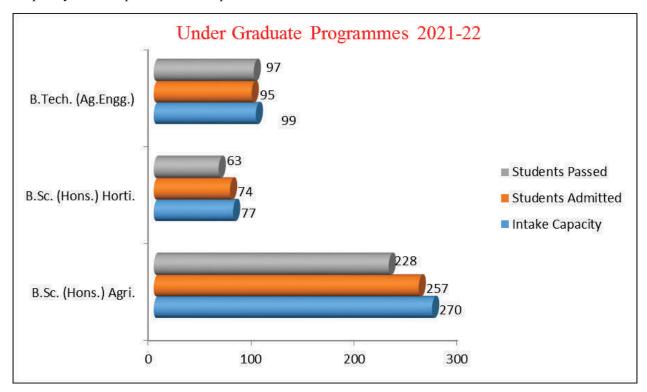
Details of admissions at under graduate level in the university for the academic year 2021-22 are given in Table 3.1.



Table 3.1 Under Graduate Programmes

| No. | Degree course and duration                    | College where course offered                               | Intake<br>capacity* | Students admitted | Students passed |  |
|-----|---|--|---------------------|-------------------|-----------------|--|
| 1   | B.Sc. (Hons.) Agri.<br>4 years (8 Semesters)  | College of Agriculture,<br>Junagadh                        | 129+20              | 143               | 131             |  |
| 2   |   | College of Agriculture,<br>Motabhandariya (Amreli)         | 77+00               | 71                | 67              |  |
| 3   |   | College of Agriculture, Khapat (Porbandar)                 | 44+00               | 43                | 30              |  |
| 4   | B.Sc. (Hons.) Horti.<br>4 years (8 Semesters) | College of Horticulture,<br>Junagadh                       | 67+10               | 74                | 63              |  |
| 5   | B.Tech. (Agril. Engg.) 4 years (8 Semesters)  | College of Agricultural Engineering & Technology, Junagadh | 86+13               | 95                | 97              |  |
|     | Grand Total 403+43 426 388                    |  |                     |                   |                 |  |

<sup>\*</sup>Intake capacity= State quota + ICAR quota



Apart from above intake in degree programmes, there is a provision to admit the students through lateral entry, who have passed polytechnic diploma (Three years) from SAUs of Gujarat to degree programme directly in the second year *i.e.* third

semester considering the intake capacity of 10% of state quota seats under graduate seats.

Details of admission through diploma to degree programme at under graduate level in the university for the academic year 2021-22 are given below.



### **Table 3.2 Diploma to Degree Programmes**

| No. | Degree course             | College where course offered                       | Intake capacity | Students admitted |
|-----|---------------------------|--|-----------------|-------------------|
| 1   | B.Sc. (Hons.) Agri.       | College of Agriculture, Junagadh                   | 14              | 14                |
|     |                           | College of Agriculture, Motabhandariya (Amreli)    | 8               | 8                 |
|     |                           | College of Agriculture, Khapat (Porbandar)         | 4               | 4                 |
| 2   | B.Sc. (Hons.) Horti.      | College of Horticulture,<br>Junagadh               | 7               | 7                 |
| 3   | B.Tech.<br>(Agril. Engg.) | College of Agricultural Engg. & Tech.,<br>Junagadh | 9               | 9                 |

#### 3.3 Post Graduate Education

The Junagadh Agricultural University imparts Post Graduate instructions with the help of the PG recognized teachers of the university.

#### (1) Procedure of Admission

- (A) A candidate for admission to the Master's degree should possess Bachelor's degree with an OGPA not less than 6.00 (10.00 basis) or its equivalent in aggregate as well as in the subject in which admission is sought.
- (B) A candidate for admission to the Ph.D. degree programme should possess Master's degree in concerned subject with an OGPA of not less than 6.50 (10.00 basis) or its equivalent.
- (C) A candidate shall have to appear in the entrance test, admission is given on the merit based on weightage of 50% marks obtained in entrance test, and 50% marks of the last degree obtained.
- (D) Relaxation of 5% marks (OGPA at UG/PG level) is given in eligibility to ST, SC and SEBC candidates for admission to Master/Ph.D. degree.
- (E) Seats for ICAR and Govt. of India nominees, ST, SC, SEBC, Gujarat State nominees and inservice candidates are reserved as per university /ICAR rules.

- (F) All the Agricultural Universities of Gujarat adopts Centralised admission procedure for all PG programmes.
- (G) A candidate should be domicile of Gujarat State. Candidates from other state who has obtained their UG/Master degrees from SAUs of Gujarat shall be admitted on the vacant seats.
- (H) The students appeared in AIAEE of ICAR are admitted through ICAR (25% of intake).
- (2) Academic Programmes offered at Post Graduates level

Details of admissions at Post Graduate level in the university for the academic year 2021-22 are given in Table 3.3.





**Table 3.3 Post Graduate Programmes** 

| No. | Name of the course | Duration      | College                    | Intake<br>capacity* | Students admitted | Students passed |
|-----|--------------------|---------------|----------------------------|---------------------|-------------------|-----------------|
| 1   | M.Sc.              | 2 Years       | College of Agriculture,    | 78+23               | 69                | 96              |
|     | (Agri.)            | (4 Semesters) | Junagadh                   | 70.25               |                   |                 |
| 2   | M.Sc.              | 2 Years       | College of Horticulture,   | 17+03               | 16                | 16              |
|     | (Horti.)           | (4 Semesters) | Junagadh                   | 17+03               |                   |                 |
| 3   | M.Tech.            | 2 Years       | College of Agricultural    |                     | 4                 | 15              |
|     | (Agril.            | (4 Semesters) | Engineering &              | 33+07               |                   |                 |
|     | Engg.)             |               | Technology, Junagadh       |                     |                   |                 |
| 4   | M.B.A. in          | 2 Years       | Post Graduate Institute of |                     | 24                | 19              |
|     | Agri-              | (4 Semesters) | Agri-Business              | 38+09               |                   |                 |
|     | Business           |               | Management, Junagadh       |                     |                   |                 |
| 5   | Ph.D.              | 3 Years       | College of Agriculture,    |                     | 32                | 41              |
|     |                    | (6 Semesters) | Junagadh, College of       |                     |                   |                 |
|     |                    |               | Agricultural Engineering & | 48+12               |                   |                 |
|     |                    |               | Technology, Junagadh,      | 46±12               |                   |                 |
|     |                    |               | and Agri-businees          |                     |                   |                 |
|     |                    |               | Management, Junagadh       |                     |                   |                 |
|     | Grand Total        |               |                            | 214+54              | 145               | 187             |

<sup>\*</sup>Intake capacity= State quota + ICAR quota

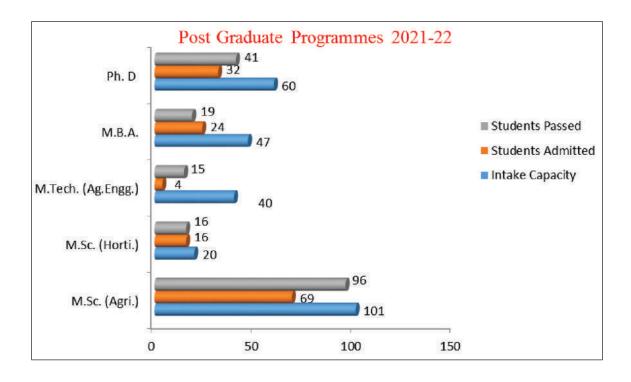




Table 3.4 Number of students passed out with their class obtained from defferent degree programme during academic year 2021-22.

| Degree course                          | First Class with Distinction | First<br>Class | Second<br>Class | Pass<br>Class | Total |
|--|------------------------------|----------------|-----------------|---------------|-------|
| B.Sc. (Hons.) Agri.at Junagadh         | 53                           | 68             | 10              | 01            | 131   |
| B.Sc. (Hons.) Agri. at Mota Bhandariya | 09                           | 54             | 04              | 00            | 67    |
| B.Sc. (Hons.) Agri. at Khapat          | 05                           | 22             | 03              | 00            | 30    |
| B.Sc. (Hons.) Horti.                   | 14                           | 41             | 08              | 00            | 63    |
| B.Tech. (Agril. Engg.)                 | 04                           | 58             | 35              | 00            | 97    |
|  |                              |                | 1               | UG Total      | 388   |
| M.Sc. (Agri.)                          | 34                           | 57             | 05              | 00            | 96    |
| M.Sc. (Horti)                          | 08                           | 07             | 01              | 00            | 16    |
| M.Tech. (Agril. Engg.)                 | 05                           | 09             | 01              | 00            | 15    |
| MBA in Agri. Business                  | 08                           | 08             | 03              | 00            | 19    |
| Master Total                           |                              |                |                 |               | 146   |
| Ph.D. <b>Ph.D. Total</b>               |                              |                |                 | 41            |       |
| Grand Total                            |                              |                |                 | 575           |       |

#### 3.4 Polytechnic Diploma Education

Looking to the present scenario of changing pattern in education system, Junagadh Agricultural University have begun three years' Polytechnic Diploma programmes in Agriculture, Horticulture and Agro-Processing. The programmes started from academic year 2009-10 with the aim to cater the present needs in the different areas of agriculture and allied fields. Another polytechnic programme in Agril. Engineering is started from academic year 2013-14.

The admission criteria in the diploma programmes in Junagadh Agricultural University is purely on merit basis *i.e.* percentage of marks obtained at SSCE (10<sup>th</sup> Standard) with English as a compulsory subject from any statutory Board in the Gujarat State or Examinations recognized as equivalent thereto. Among the seats allotted for admission, 49% seats are reserved for various Backward Classes, *i.e.* 15% for Schedule Tribes, 7% for Schedule Caste, 27% for

Socially and Educationally Backward Communities as declared under Baxi Commission (Mandal Panch) and additional 10% for Economical Weaker Section as a supernumerary as per Government of Gujarat rules. Moreover, 5% seats are reserved for disabled (Divyang) candidates as per the directives from the Supreme Court of India. One per cent seat is also reserved for children of defence personnel/ exservicemen.

All the Agricultural Universities of Gujarat for all polytechnic programmes adopt central admission procedure. Weightage of marks for participation in sport is given in admission. Weightage of 5% marks is given to farmer's son/daughter in the Diploma in Agriculture and Horticulture.

## (1) Duration and Admission Requirement of Polytechnic Diploma Courses

Admission requirements for diploma courses are shown in Table 3.5



Table 3.5 Admission requirements for polytechnic programmes

| Diploma course & Duration | Polytechnic                           | Eligibility for admission           |
|---------------------------|---------------------------------------|-------------------------------------|
| Diploma in Agriculture    | Polytechnic in Agriculture, Dhari     | The candidate should have           |
| 3 years (6 Semesters)     | Polytechnic in Agriculture, Sidsar    | passed Secondary School Certificate |
|                           | Polytechnic in Agriculture, Halvad    | Examination (SSCE) with English as  |
| Diploma in Horticulture   | Polytechnic in Horticulture, Junagadh | compulsory subjects from any        |
| 3 years (6 Semesters)     |                                       | statutory Board in Gujarat State.   |
| Diploma in Agro           | Polytechnic in Agro-Processing,       | The minimum requirement of          |
| Processing                | Junagadh                              | aggregate marks shall be as under:  |
| 3 years (6 Semesters)     |                                       | 1. ST & SC : 35%                    |
| Diploma in Agril. Engg.   | Polytechnic in Agril. Engineering,    | 2. SEBC : 40%                       |
| 3 years (6 Semesters)     | Targhadia (Rajkot)                    | 3. General : 40 %                   |
|                           |                                       | 4. EWS : 40 %                       |

### (2) Admissions of Polytechnic Diploma Courses

Details of admissions at diploma level in the university for the academic year 2021-22 are given in Table 3.6 **Table 3.6 Details of admissions at diploma level in the University for the academic year 2021-22** 

| No. | Diploma courses (Polytechnics)       | Intake<br>capacity | Students admitted | Students passed |
|-----|--------------------------------------|--------------------|-------------------|-----------------|
| 1   | Diploma in Agriculture, Dhari        | 44                 | 41                | 38              |
| 2   | Diploma in Agriculture, Halvad       | 33                 | 31                | 25              |
| 3   | Diploma in Agriculture, Sidasar      | 33                 | 33                | 30              |
| 4   | Diploma in Horticulture, Junagadh    | 44                 | 44                | 33              |
| 5   | Diploma in Agro-Processing, Junagadh | 44                 | 36                | 35              |
| 6   | Diploma in Agril. Engg, Targhadiya   | 44                 | 20                | 38              |
|     | Total                                | 242                | 205               | 199             |

# 3.5 Academic Excellance during COVID-19 pandemic and post COVID-19

During the pandemic period of COVID-19 and post COVID-19, all colleges including polytechnics have been conducting live online classes ever since lockdown was announced by using various video conferencing apps like Zoom, Google Classrooms, Cisco webex etc.

More than 90% attendance is being reported for the virtual classrooms. The teachers all across the various faculties have been engaging the students with technology-aided teaching. Home assignments are being sent over WhatsApp, in the form of PDF as well as concepts are being taught in the form of Power-point presentations, recorded video and audio lectures. Doubts are being cleared by being available to the students all the time by being a part of student-teacher WhatsApp groups. Exam question papers, study material and notes are being uploaded regularly on the study portal namely, Academic Information Management System (AIMS) developed by JAU. Course-wise material has been uploaded in the AIMS by the various faculties of the university and the students were utilizing the system in the COVID-19 and post COVID-19 pandemic situation.



During and after the COVID-19 epidemic, Junagadh Agricultural University held more than 700 exams for undergraduate, post graduate, and polytechnic degrees with a total enrolment of 32,000+ peer students under virtual supervision. Moreover, various certificates *viz.*, result, marksheet, provisional passing certificate, *etc.* were given to the passed out students so that they can apply for further studies and to aid to get jobs.

Students from interior areas of Gujarat and from different states have given these examinations right from their home without any absentia. Moreover, for post graduate students, keeping in view their higher education and jobs related issues their prelim exam, prelim viva-voce exam, seminar, pre thesis seminar and thesis viva exam have also been conducted online through using various video conferencing apps like Zoom, Google Classrooms, Cisco webex etc. for various faculties and disciplines of the University.



### 3.6 Institutional Development Plan

NAHEP has been formulated by ICAR for five years starting from 2017-18. The project is proposed on 50:50 cost-sharing basis between the World Bank and the Government of India, implemented at the Education Division, ICAR, New Delhi. Overall, the project aims to develop resources and mechanism for supporting infrastructure, faculty and student advancement, and providing means for better governance and management of agricultural universities, so that a holistic model can be developed to raise the standard of current agricultural education system that

provides more jobs and is entrepreneurship oriented and on par with the global agriculture education standards.

Among the three components of the NAHEP i.e. 1) Support to Agricultural Universities; 2) Investments in ICAR for Leadership in Agricultural Higher Education, and 3) Project Management and Learning; Institutional Development Plan (IDP) is one of the majorsub-components of Components-1: Investments toward 21st Century Agricultural Universities Education Plan. The IDP for Junagadh Agricultural University (JAU) has been considered by the ICAR for improving competency of faculty and education quality at graduation level students among all faculties of the JAU. The theme of the project awarded to JAU is "Automation, Robotics and Drone Technology in Agriculture". This project is strengthening human resource capabilities by exposing students to international environment of agricultural education. The project is pillared on fastlearning of emerging technologies like robotics & artificial intelligence so as to meet the demand for highly skilled workers; to reduce drudgery in farm operations and to better explore the needs of biological variability, human interference and inspection, decision making and action in the field of agriculture and allied disciplines. The Followings are the major objectives of the IDP for JAU, Junagadh.

- 1. To develop skill and inculcate entrepreneurship among the students.
- 2. To strengthen linkages between institute, industries, corporate and foreign agencies.
- 3. To strengthen student services and integrated management information system.

### **Summary of the Progress NAHEP-IDP-JAU for FY 2021-22**

➤ JAU Ranked First consecutively 3<sup>rd</sup> time in all India AU Ranking in NAHEP-IDP in Annual Review by PIU, New Delhi.