

Chapter - I



INTRODUCTION



The Junagadh Agricultural University was established on 1st May, 2004 under Gujarat Agricultural Universities Act-2004. On completion of its fifteenth year, Annual Report is published with detailed information about its various activities and achievements.

1.1 Background

The Junagadh Agricultural University came into existence as a part of process of development of Agricultural Universities in Gujarat w.e.f. May, 2004. The jurisdiction of the University includes ten districts of Saurashtra region, *i.e.*, Junagadh, Gir-Somnath, Rajkot, Morbi, Jamnagar, Devbhumi Dwarka, Surendranagar, Bhavnagar, Amreli and Porbandar. The head quarter of the University is located at Junagadh.

1.2 Aim

The aim of Junagadh Agricultural University is to promote agricultural productivity in general and to improve the economic condition of rural community in particular through integration of teaching, research and extension education.

1.3 University Management and Administration

As per the GAUs Act-2004, the Chancellor, Vice Chancellor, Director of Research & Dean PG Studies, Dean Faculty of Agriculture and Horticulture, Dean Faculty of Agricultural Engineering & Technology and Home Science, Dean Faculty of Fisheries Science, Dean Faculty of Agri-Business Management, Dean Faculty of Veterinary Science & Animal Husbandry, Director of Extension Education, Registrar, Comptroller, Librarian, Director (Information Technology) and Director of Students' Welfare are officers of the University.

Hon'ble Governorshri of Gujarat acts as the Chancellor of the University. Shri Om Prakash Kohli, Hon'ble Governorshri of Gujarat was the Chancellor where as Dr. A.R. Pathak was the Vice Chancellor and Dr. A. M. Parakhia, Dr. V. P. Chovatia and Dr. P. M. Chauhan were the Registrar during the period under report.

The details of various activities of the University are as follows:

1.4 Education

The educational programme in Junagadh Agricultural University is based on two-tier system. The first one covers higher education in Agriculture, Horticulture, Agricultural Engineering & Technology, Fisheries Science Veterinary Science & Animal Husbandry and PGIABM, in which polytechnic diploma; UG and PG residential instruction programmes are covered. While the second consists of lower education, *i.e.*, diploma and certificate programmes like Agro-based I.T.I., Agriculture Diploma, Bakery Training, *Mali* Training and Extension Education Training.

During the period under report, 243 students at polytechnic diploma level, 507 students at UG level, 37 students Diploma to Degree level and 265 students at PG level were admitted in various polytechnics/ colleges situated at on/off campus of the University, *i.e.*, Polytechnic in Agriculture, Horticulture, Agro-Processing, Agricultural Engineering, Animal Husbandry, College of Agriculture, College of Horticulture, College of Agricultural Engineering & Technology, College of Veterinary Science & Animal Husbandry and PG Institute of Agri-Business Management at Junagadh, College of Fisheries Science at Veraval, College of Agriculture at Motabhandariya (Amreli) and College of Agriculture, Khapat (Porbandar). A total 137 students at diploma level, 354 students at UG level, 215 at Master level and 36 at Doctoral level have successfully completed their respective courses during the period under report.

The Fourteenth Annual Convocation was held at JAU, Junagadh on December 28, 2018. Dr. P. K. Mishra, Additional Principal Secretary to Hon'ble Prime Minister, Govt. of India, New Delhi, was the chief guest. As many as 615 students were awarded Under Graduate and Post Graduate degrees by Hon'ble Governorshri of Gujarat and Chancellor of this university, Shree O.P. Kohli. For the academic year 2018-19, 8 Gold Medals, 50 Gold Plated Silver Medals and two Cash Prizes were awarded to the students for their outstanding performance, achieving high percentage of marks and stood first on merit in various examinations.





The university has implemented online exam management system through JEMS (Junagadh Exam Management System). The software has been purchased to strengthen the examination and evaluation system as well as timely and precisely declaration of results, issuing of notifications, markheets and other examination relevant certificates.

1.5 Research

The monitoring and supervision of various research projects, planning and implementation of research activities at different research stations as well as the PG research programmes and their evaluation were carried out under the guidance of Director of Research & Dean, PG Studies.

Junagadh Agricultural University has 31 research stations including multidisciplinary main research stations, sub centres on various crops and testing centres spread over in North Saurashtra Agro-climatic Zone and South Saurashtra Agro-climatic Zone. The research at these stations are carried out in the field of Agriculture, Horticulture, Agricultural Engineering, Animal Sciences and Fisheries for catering the needs of farmers, artisans, livestock owners, fishermen and rural masses for their upliftment. The research activities have been carried out in Crop Improvement, Plant Protection, Soil Science, Cropping System, Water Management, Weed Management, Nutrient Management, Organic Farming, Horticulture, Agricultural Meteorology, Plant Physiology, Biochemistry, Biotechnology, Seed Science and Technology, Social Sciences, Agricultural Engineering, Animal Science, Fisheries Science, etc.

The efforts made by scientists of the University emerged with 6 new variety, 49 farmers' recommendations and 29 scientific recommendations as well as 131 new technical programmes were finalised during the reporting year. Besides this, seed production programmes were also taken up for different varieties of different crops. About 3709.52 qt nucleus/breeder seed, 2551.92 qt truthful seed, 619.35 qt Foundation seed, 2180.00 qt Certified stage seed as well as 202108 number of planting materials were

produced. Besides, University also produced 186.98 tons of *Trichoderma*, 115 tons of *Beauveria*, 6673 liter of liquid biofertilizer, 46365 Pheromone trap for pink bollworm, 1.04 lakh lure and other biopesticides for farmers. During the year under report, total 45 new research projects were sanctioned by ICAR, Government of India, Government of Gujarat and other agencies.

1.6 Extension Education

Through the extension education activities, A total 320 students have completed different certificate/ diploma courses viz., Agriculture Diploma, Bakery Training, Mali Training and Agro Based I.T.I. etc. 444 Agro Input Dealers have completed their courses successfully. The T & V System training programmes were held and about 679 Extension Officers of State Department of Agriculture and Horticulture were participated in different 19 training programme. Twenty Eight other training programmes were also organized, in which 4980 farmers / beneficiaries were participated. Through the transfer of technology (TOT) centres, 145 on-campus and 174 off-campus training programmes were organized, wherein 11,352 participants were participated. Beside this, the TOT centres regularly organized extension education activities like workshops, farmers' days, agricultural exhibitions, field visits, cattle camps, Farmers scientists meetings etc. which benefitted 1,97,076 farmers. KVKs conducted 1745 FLDs on various crops in 623.23 ha. KVKs guided farmers to solve their field level problem through personal visits by SMS. The feedback on farmers' problems were collected and sent to concerned scientists for formulation of research programme.

Through six programme arranged by Farm Advisory Scheme a total 5,77,301 participants were benefited. Under Centre of Communication (CoC) Scheme, twenty Gram Kissan Samiti (GKSSs) were formulated and ten Khedut Shibirs were organised in which 320 farmers participated. The Extension Education Centres benefited 10,66,499 farmers by organising 26774 extension programmes.





The Farmer FIRST programme is implemented in four selected villages of Amreli district comprising of five interventions like IFS for 40 farmers, NRM for 50 farmers, Enterprise for 100 beneficiaries, Crop based i.e. Wheat - 100, Groundnut - 100, Cotton - 160, Gram-50 farmers and Livestock for 50 dairy farmers. Thus, Farmer FIRST programme covered 650 Farm Families. For updating their knowledge, 36 on-campus training programmes, Six field days and Four meetings of farmers were organized.

The efforts were made to create awareness among the farmers/ rural people about technological advancement thorough different media viz., TV, radio and publication of agricultural literature. During the report period, 34 TV programme and 28 radio talks were given by scientists of the University. Besides these, six booklets were published. University News Bulletin “*JAU News Letter*” is being published quarterly by the Directorate of Extension Education. AGRISNET studio is established for the production of various multimedia gadgets/ video CDs on modern agricultural Technologies for farmers. Community Radio Station “*Janvani FM 91.2*” is broadcasting programmes twice a day on the current issues related to Agriculture and Allied field.

The mass communication programme, “Kishan Kalyan Karyashala” was organized by the University for one day on at selected taluka place of Saurashtra Region on 2nd May, 2018 as part of Krushi Mahotsav-2018. The main aim of campaign was “Doubling the farmers' income by 2022”. More than 150 Scientists of this University communicated new agricultural technologies to more than 1,07,000 farmers, farm women, dairy farmers and other stake holders. They were advised to adopt “Integrated and Diversified Farming” including horticulture, drip irrigation, water harvesting methods, dairy, bee keeping, organic farming for increasing the crop production and productivity on sustainable basis and thereby income.

1.7 Students' Welfare

Director, Students' Welfare is responsible for making arrangements for housing, boarding and welfare of the students and coordinates various

co-curricular activities such as arrangement of Inter Collegiate, Inter University and National level Sports tournaments, literary and cultural competitions, and also implements various activities of National Service Scheme as Programme Coordinator (NSS) other than the academic work.

The University is always looking forward for the welfare of the students through different activities like sports, cultural, spiritual programmes, NSS, health, adventure, educational tour with a view to develop personality, character and high human values in Polytechnic, UG and PG students of the University.

The campus interviews were arranged for placement of students at different colleges. A total of 154 students by campus interview were selected for various jobs. Five Inter-collegiate sports and four cultural activities were organised by the University. Students also participated in All Gujarat Inter Agricultural University Polytechnic Sports: 2018-19, Gujarat State Inter Agricultural University Cultural-Literacy Competition, Inter University National Debate Competition, All India Inter Agricultural Universities Sports Meet and Basic Rock Climbing Course. Under NSS, 1495 number of volunteers participated at university level NSS camps and 1783 number of volunteers participated in NSS Awareness-cum-celebration programme. Nine educational tours were arranged for the students of Faculty of Agriculture, Agricultural Engineering & Technology, Veterinary Science, Fisheries Science and various polytechnics. Various scholarships were availed for the students. University canteen and all hostels are provided with CCTV camera.

1.8 University Library & Information Technology

The University Library possesses around 54500 books, about 5 Indian as well as 14 foreign journals and 16000 back volumes. The University library already has 441 e-books and this year we have subscribed 64 more e-books. Facility by ICAR for foreign Journals through Online Access of Journals Consortium for e-Resources in Agriculture (CeRA) and KRISHIKOSH are available and CD-ROM databases like CAB, AGRICOLA, AGRIS with latest





data are available for the users. Full time internet, scanning and CD writing facilities are available for the students in which there are 40 work stations with internet access. These facilities are being extensively utilized by both faculty and students on an average of daily 200 to 250 users for about 12 hours per day. separate Air Conditioned Reading Room is developed with the best facilities as well as good ventilation and aeration. This AC reading room accommodates approximately 100 students.

Junagadh Agricultural University (JAU) has established dedicated Information Technology Cell with an aim to provide Information Technology (IT) resources and services to its students, faculties, research scientists, extension officers and staff. IT resources and services provided by the University through IT Cell include uninterrupted high-speed internet access within campus as well as in sub centres located outside the university area, email, video conferencing, JAU Exam Management System (JEMS), Online JAU Circulars, Mera Gaon Mera Gaurav, Online HRD/Tour programme, Online PF, Student Fees Receipt, KVK Bill Management, CCTV surveillance, Wi-Fi access, Google apps, Online Recruitment, etc.

To make governance more transparent, the purchases through Government eMarketplace (GeM) by Government users have been authorised and made mandatory by Ministry of Finance by adding a new Rule No. 149 in the General Financial Rules, 2017. For the university purchases through GeM, IT Cell has developed online solution for registration and user management.

JAU has total 260 Mbps dedicated 1:1 Internet Lease Line (ILL) connectivity through different internet service providers. This includes 100 Mbps 1:1 Internet Leased Line (ILL) through Railtel under National Knowledge Network (NKN) that encourages the usage of specialized applications, which allows sharing high performing computing facilities, e-libraries, virtual classrooms and large databases, 25 Mbps 1:1 ILL from BSNL and 135 Mbps 1:1 ILL from Ishan.

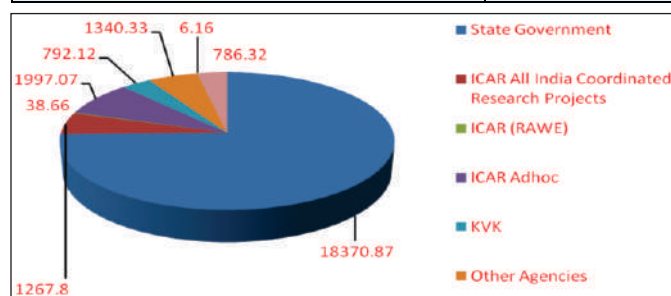
University has installed highly secured network architecture with Firewall, IDS (Intrusion Detection System), Analyzer, Content filtering etc. The coverage of the University Campus Network is extensive with more than 1000 network points and over 50 wireless access points. Network Management Software is being used for continuous network monitoring and fault detection and its solutions. Moreover, more than 6500 mt. fibre cable is laid down to provide high speed network connectivity. Moreover, the University is also connected to Asia's biggest network "Gujarat State wide Area Network (GSWAN), Gandhinagar" through optical fibre connectivity for accessing online Government's programmes.

1.9 Finance and Accounts

Major sources of finance were Government of Gujarat, Government of India, ICAR and other agencies, which sanctioned grant through different schemes. During the period under report, State Government sanctioned 8544.74 lakh under plan and 9826.13 lakh under non-plan.

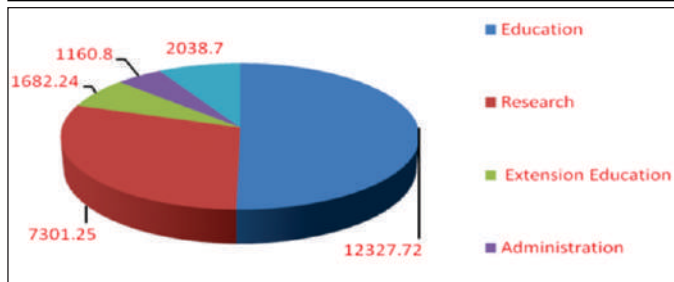
The finance sources, fund and budget (₹ in Lakh) Income:

▪ Opening Balance as on 01.04.2018	6408.20
▪ Grant Received during 2018-19	
• State Government	18370.87
• ICAR All India Coordinated Research Projects	1267.80
• ICAR (RAWE)	38.66
• ICAR Adhoc	1997.07
• KVK	792.12
• Other Agencies	1340.33
• N.S.S.	6.16
• RKVY	786.32
▪ University Receipts	1784.95
Total	32792.48





Expenditure:	(₹ in Lakh)
• Education	12327.72
• Research	7301.25
• Extension Education	1682.24
• Administration	1160.80
• Civil works: Construction/Maintenance	2038.70
Total	24510.71



The University is entrusted with the work of Internal Audit, Local Fund Audit and AG Audit. During the period under report, Local Fund, Junagadh has completed the audit work for the year 2016-17 and Accountant General for the financial year 2014-15 to 2018-19 as well as specific compliance audit for the year 2014-15 to 2018-19 also completed by A.G. Audit office, Ahmedabad. Out of 8 paras up to Audit F.Y. 2013-14 Paras no. 2(E) and F.Y. 2017-18 para no 6 of A.G. Audit settled during the report period. Moreover, after first compliance with the local fund out of 67 paras of the 2014-15, 5 audit paras settled during the report period.

The pension cases on account of superannuation and voluntary retirement of the officers/employees from the University have been settled granting the pension/commuted pension and gratuity. A total 84 pensioners were retired during the year and the payment was made to the staff/officers for their retirement benefits. The amount of ₹ 18,60,80,865/- was paid to the employees for the cases comprised of 115 Part final withdrawal, 211 special advances and 1 for ordinary advances. While ₹ 6,25,67,375/- was paid as final withdrawal to (76) and transfer (2) employees during current financial year. Thus, 405 University employees were benefited of P.F. Worth Total ₹18,60,80,865/- in current financial year.

Estate Management

The civil works like construction and related works, repairs and maintenance of buildings and roads, water supply, maintenance of drainage system, street light, electrification, repairing of electrical faults, *etc.* were looked after by the Executive Engineer. During the year under report, Construction Committee and Board of Management accorded approval for various works meant for creating new facilities at main campus as well as at centres of the University. Total 16 civil works were completed with an outlay of ₹ 1285.63 Lakhs, where as 14 civil works was on hand with an outlay of ₹ 1661.28 Lakhs.

