



ANNUAL REPORT

2019-20



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Dr. Rajendra Prasad Central Agricultural University
Pusa, Samastipur - 848 125, Bihar

ANNUAL REPORT

(2019-20)

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Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar

REVIEW OF DR. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY, PUSA DURING THE YEAR 2019-20

Background:

Dr. Rajendra Prasad Central Agricultural University (DRPCA) Pusa established in 2016 has very rich legacy of organized agricultural education, research and extension in India. In fact, it is the mother of organized agricultural education dating back 1905 when it was established as "Agricultural Research Institute and College" by Lord Curzon. At DRPCA, Pusa, we impart high quality agricultural education, research and extension services to agricultural fraternity, students and farmers for their betterment and empowerment in health, education and economic well-being on sustained and continuous basis. Efforts in these directions resulted in producing many educators, administrator, policy planners, and executives in educational and research organizations, government departments, banks, public sector undertakings etc. Through our research and extension programmes, farmers and other stake holders in science and business of agriculture have benefited enormously not only in Bihar but pan India.

Achievements:

The University is moving on track of success and development by fulfilling following missions in order to accomplish the vision of Advancing professional competency for pursuing excellence in education, research and entrepreneurship in relation to agriculture and allied sectors with ethical values to meet the regional, national and global needs and offering specialized services to the farmers for decent livelihood.

Following were some the major achievements of financial year 2019-20:

Educational & Academic

The University has made outstanding progress in academic front during the year under review. A total of 546 students were admitted from 27 states of India registering 32.48% increase over the last year. The students graduated from the University have qualified for various National level examinations such as SRF (18), JRF (21), NET (40), GATE (8), Govt. job (17) UGC fellowship (3) and CAT (1). About 50% students of management and 25% others students were placed before COVID-19 pandemic.

The University-Industry linkage has been strengthened by providing 5% of seats as supernumerary seats over and above the total intake in different disciplines of PG and Ph.D. program. Further, education is strengthened by opening the avenue of admission of foreign students in different disciplines of Post Graduate and Ph.D. Program. Moreover the collaboration has been made with three national and one international institute for mutual academic benefit of students and faculty. To ensure academic integrity and purity, anti plagiarism regulations has also been introduced. Under NAHEP program, the implementation of e-Governance in the university has been initiated.

Faculty Induction Program was organized during 1st to 21st August, 2019 for newly appointed 51 Assistant Professors/Scientists to apprise them about rule and regulation of the university and researchable issues of agriculture and allied field..

Research and Innovation

The university puts major efforts in development of technologies and crop varieties suitable for different agro-ecological conditions through various operational research projects. During 2019-20, seven improved varieties, viz. Rajendra Gehun-1&3 (wheat), Rajendra Saraswati (Paddy), Rajendra Ganna – 1 (Sugarcane), Rajendra Dhania – 1&2 (Coriander) and Rajendra Hybrid Makka – 1 (Maize) were released by CVRC/SVRC.

The university has developed a unique model for proper disposal of floral offerings of temple by converting them into value added products. By technical support of the University, the floral offerings to Lord Shiva in temples - Baba Baidyanath temple, Deoghar (Jharkhand) and Baba Garibnath temple, Muaffarpur (Bihar) now being converted into vermin-compost and its selling has fetched revenue of Rs. 4.00 lakh in three months. The University has also developed Eco herbal gulal colors with floral and herbal extracts for use during Holi festival. Moreover, a recharge structure has been designed and developed for ground water recharge and drainage of excess water. The system recharges about 6.5 lps of filtered water to second aquifer.

Extension :

The University has well developed infrastructure for transmission of technology to farming community for their economic upliftment. During the year 2019-20, four new KVKs were established and staff recruitment process was initiated. The Kisan Mela-2020 was organized during February 16-18, 2020 with a major theme '**Agricultural Waste Management for Rural Livelihood**' (ग्रामीण जीविकोपार्जन हेतु अवशिष्ट प्रबन्धन). A total of 3576 farmers were benefitted by different trainings; besides conducted 5730 FLDs, 85 OFTs and 15 technology assessment trials.

Administrative & Infrastructural Achievements:

The University has made all efforts to upgrade itself on administrative and infrastructure fronts. The career promotion of 113 faculty/scientist and 12 supporting staff were completed successfully and recruitment of 65 technical staff has also been done. The administrative reform was initiated by restructuring and rationalizing the staff structure.

The Construction of Department of Horticulture buildings, three research centre buildings, 72 Type II quarters, one girl's hostel and renovation of Boys hostel were completed. Besides, construction of Boys' and Girls' Hostel, administrative building of Horticulture & Forestry College at Piprakothi, Centre of Excellence for Embryo Transfer Technology at Piprakothi, University hospital and School of Agri Business & Rural Management was under progress. A well-equipped gymnasium was established in University campus for use by students as well as residents.

The revenue generation was increased by 30% through consultancy, testing, licensing, training and selling of agri-produce. The Accounts of 2018-19 was audited by CAG after approval of Finance Committee and University Board of Management.

Recognition and Awards :

The University was nominated among top five for 'Green University of the year 2020' for Asia Pacific Region award of the ACEEU.

A total of 79 awards at different levels (1 International, 72 National and 06 state levels) were received by the faculty/Scientists of the University for their academic and research excellence..

Publications outputs and Scholarly Communication:

The scientists of the University have published 237 -Research article in journal, 26 books, 80 book chapters, 5 training manuals, 3 Policy papers and 16 Technical/research bulletins

Five patents were filed during the reporting year.

Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar

DELAY STATEMENT IN LAYING ANNUAL REPORT FOR THE YEAR 2019-20 IN PARLIAMENT

The Annual report for the year 2019-20 with respect to Dr. Rajendra Prasad Central Agricultural University, Bihar, Pusa, Samastipur was prepared in the month of May 2020, and submitted to BOM for approval on 29.05.2020 and finally approved by BOM on 18.06.2020. There was slight delay in preparation of Annual Report of 2019-20 in spite of lockdown situation under COVID-19 pandemic.

The statement showing reasons for delay in laying of Annual Report for the year 2019-20 in Parliament is given below :-

Submission of Annual Report for approval by the Board of Management of the University	29.05.2020
Approval of Annual Report by the Board of Management	18.06.2020
Submission of Annual Report for the approval of Visitor	25.08.2020
Receipt of the Approval of Visitor	05.02.2021
Submission of printed copies of Annual Report to DARE for laying them in Parliament	



Foreword from the Vice- Chancellor



It is my proud privilege to present the 4th Annual Report of the University for the year 2019-20 in its abridged format. The detailed report is available on the university website for those who are interested in details. During report year, university has made significant achievement in all sectors be it academic excellence, technology development, extension and infrastructure development.

Our student strength has increased significantly with representation from 27 states. They have excelled in PG entrance examination of prestigious institutions of India as well as abroad along with good placement. Our efforts of technology development to deal with emerging situation has led to technology for climate resilient, cropping systems, ground water recharge and paddy straw based mushroom cultivation. To make our research programme more problems specific solution oriented with an interdisciplinary approach, new research centres are established to tackle problems of water management, climate change, food processing and wealth from waste.

I express my sincere gratitude to Hon'ble President of India, His Excellency Shri Ramnath Kovind Ji, Visitor of University, Dr. Narendra Singh Tomar Ji, Hon'ble Minister of Agriculture and Farmers' Welfare, Government of India, and Prof. P. K. Mishra, Hon'ble Chancellor of the University for their unflinching support and guidance. I am highly thankful to Dr. T. Mohapatra, Secretary, DARE, Ministry of Agriculture & Farmers' Welfare, Government of India for his encouragement and support. I compliment all Deans, Directors, Registrar, Head of departments, Pls of projects, Head of KVKs, Scientists / Teachers and other administrative, technical and supporting staffs of the University for providing valuable information for the report. I would also congratulate the team University Publication Division for timely preparation and publication of Annual Report 2019-20.


(Dr. R. C. Srivastava)

What We Are?

We, Dr Rajendra Prasad Central Agricultural University (RPCAU) Pusa established in 2016 has very rich legacy of organized agricultural education, research and extension in India. In fact, we are the mother of organized agricultural education dating back 1905 when we were established as **“Agricultural Research Institute and College”** by Lord Curzon with vision that **PUSA will be the nucleus of agricultural activities, research and education not only to benefit Bihar and Bengal but the whole of the country (then British India) and would attract the best of talents from India and abroad**. Since then lot of waters have flown in the rivers and the institute and vision of founding father kept on marching ahead in areas of agricultural education, research and extension. This can also be seen in our glorious past wherein founding fathers conceived the idea of imparting high quality education and research in agriculture through establishing UG and PG diploma programmes and Sugarcane Research Institute.

What We Do?

At RPCAU, Pusa, we aspire and impart high quality agricultural education, research and extension services to agricultural fraternity, students and farmers for their betterment and empowerment in health, education and economic well being on sustained and continuous basis. Our efforts in these directions resulted in producing many educators, administrator, policy planners, and executives in educational and research organizations, government departments, banks, public sector undertakings etc. Through our research and extension programmes, farmers and other stake holders in science and business of agriculture have benefited enormously not only in Bihar but pan India. This all have become possible with concerted efforts of our team members comprising of learned faculties, scientists, technicians, administrative and supporting staffs.

Why one should be here?

Because, we are the best in eastern India and second none to any central agricultural universities of India. We have eight colleges/schools- TCA Dholi, PG college of Agriculture, Agricultural Engineering, Basic Science and Humanities, Community Science, Fisheries, Horticulture & Forestry, and Agri-Business & Rural Management, besides eleven research centers/institutes dedicated to specific problems. We are having lush green campus with serene environment and excellent ambience for pursuing quality academic, research and extension activities. We have dedicated team of Academicians, Scientists, Administrators, and Technicians besides excellent infrastructure facilities and supports services viz. Laboratories, Digital Central Library, Smart Classrooms, ARIS cell, Placement cell, KVK networks, Hostels, Guest Houses, Auditorium, Sports complex, Gyms and IT enabled services support systems. We are in process of improving and adding new infrastructure to make campus a better place of living. These all speaks our level of dedication, determination, demand and delivery turning into pan India composition of students' admissions, faculties and facilities development, that's why one should be here.

Our Proud Moment

Presentation to Visitor :

Hon'ble President of India, Shri Ram Nath Kovind ji, hosted a conference of 46 Heads of Central Universities and Institutes of Higher Learning at Rashtrapati Bhavan on 14 December 2019 wherein RPCAU was represented by Hon'ble Vice-chancellor Dr. R. C. Srivastava. On behalf of all three central agricultural universities, he made a presentation on best practices, and achievements of the universities. It was a proud moment for the university to be in Rashtrapati Bhawan to make a mark of university.



Dr. Rajendra Prasad Central Agricultural University

Pusa, Samastipur - 848 125, Bihar



Executive Summary

During the period under report, the university has emerged as dynamic institution of higher learning, research and extension in agricultural and allied sciences. This university has made all round developments be it Academics, Research, Extension, Infrastructure development, State of the art facilities development in Libraries and Laboratories, Hostels, Gymnasium, Staff welfare and Women Empowerment. A total of 546 students from 27 states of India took admission registering 32.48% increase over the last year signifying pan India presence of the University. This year 96 students of the university cracked different national level exams like SRF/JRF/GATE/NET and National Fellowships, *etc.* Approximately 50% of our MBA/ Rural management and 25% of willing undergraduates / post-graduate students got placed in reputed organisations/ companies of the country despite COVID-19 lock down effect.

The faculty members and the students not only published good number of scientific research papers, books and book chapters, technical bulletins and dissertations at MSc and PhD level but also have developed a number of promising varieties of different crops like rice, wheat, maize, sugarcane, coriander and got them released through CVRC/ SVRC. They have developed promising technologies for climate resilient agriculture, rice wheat cropping system, ground water recharge, and rice straw based mushroom production *etc.*

To augment the farmers income and show case the farmer friendly technologies, products & services developed by the university have been transferred to farmers by organising farmers fair, FLD, OFT, training programs *etc.* whereby 35761 farmers got benefited with enriched knowledge of scientific cultivation and waste management. The university has created six centre of excellence in contemporary & challenging areas like climate change, food processing and nutrition, water management, waste management, farm machinery, mushroom production, food processing, and start up facilitation centre a few to mention for farmers focused research and innovation. The wealth from waste management technologies and solar energy utilization of the university got recognized by '**Green University of the year 2020' for Asia Pacific Region award of the ACEEU.**

The University has strengthened the scientific/ teaching manpower pool to upgrade the quantum and quality of teaching and research by promoting 113 scientists/ faculties, 65 technical and 12 supporting skilled staffs to their next higher grade and recruiting 51 scientists/ faculties and 89 technical staffs. The restructuring and rationalisation of university staff structure has also been done in addition to adoption of technical service rule of ICAR pattern. These all steps reenergised the scientific manpower and their productivity with result that university has generated revenue of rupees 08.61 crore.

By end of report year, COVID-19 hit the country. However, the university fought with COVID-19 pandemic very effectively by adhering all advisories issued by the Govt. of India and adopting proactive approaches and best practices, *i.e.*, thermal screening, wearing masks, hand sanitization, campus sanitization and maintaining social distancing, *etc.* thereby ensuring complete control over the deadly virus. So far, not a single case of COVID-19 positive has been found/ reported from the campus despite of having three to four quarantine centres in and around the university. We pray the almighty to keep all residents of campus safe and healthy.

About the University

Dr. Rajendra Prasad Central Agricultural University, Pusa was established on 7th October, 2016. In its archive, the university owes legacy to state agriculture university, Rajendra Agricultural University, Pusa established in 1970 and earlier to that Agricultural Research Institute and college, Pusa established in 1905. The university extends its jurisdiction and responsibility in the fields of teaching, research and extension in context of agriculture and allied sciences to the whole country with special reference to the State of Bihar. The academic set up of the university comprises of 08 colleges viz. Tirhut College of Agriculture, PG College of Agriculture, College of Agricultural Engineering, College of Community Science, College of Basic Sciences and Humanities, College of Fisheries and Pt. Deen Dayal Upadhyay College of Horticulture and Forestry, School of Agri Business & Rural Management with work force of 215 scientists. University has network of eight multidisciplinary research centres/institutes and three regional research centres, in addition to six Sugarcane Testing centers attached with six sugar mills. The extension set up of the university comprises of 18(16+2) *Krishi Vigyan Kendras* and Agricultural Technology Information Centre (ATIC) which looks after the transfer of technology activities of the university.

Vision

Advancing professional competency for pursuing excellence in education, research and entrepreneurship in relation to agriculture and allied sectors with ethical values to meet the regional, national and global needs and offering specialized services to the farmers for decent livelihood.

Mission

- ◆ Promoting high quality learning environment and creation of integrated approach that develops an appreciation and understanding of the environmental and socio-economic significance of soil-plant-animal-people interface.
- ◆ Shaping agricultural stakeholders into self sustaining mode through innovation centric education, cutting edge research, entrepreneurship/ start up skill development and dissemination of appropriate agricultural technology.
- ◆ Nurturing national/ global needs of achieving sustainable food production and safety while mitigating pressure on agricultural land through advance interventions of research and development.

Mandate

- ◆ To provide education in different branches of agriculture and allied sciences.
- ◆ To undertake basic, strategic and applied research for developing technologies to enhance productivity and quality of agricultural and animal produce.
- ◆ To undertake 'Lab to Land' approach for dissemination of scientific information to farmers.
- ◆ To help the state government in supplying breeder seeds for production and multiplication of foundation and certified seeds.
- ◆ To provide consultancy services and expertise in the agricultural research and development to the industries, NGOs and others.

SALIENT ACHIEVEMENT AT A GLANCE

ACADEMIC	<ul style="list-style-type: none"> ◆ Intake of student increased by 32.5 % w.r.t previous year from 27 states of India. ◆ Good number of students qualified for higher education such as SRF (18), JRF(21), NET(40), GATE(8), Govt. job(17) UGC fellowship(3), CAT(1). ◆ Created industry sponsored seat in PG for better academic-industry linkages. ◆ Collaborated with 3 national and one international institute for mutual academic benefit of students and faculty. ◆ Started training to students on soft-skill for better employability. ◆ About 50% management and 25% others students were placed before COVID-19 pandemic.
RESEARCH	<ul style="list-style-type: none"> ◆ Seven varieties released- two of wheat and coriander, and one each of rice, hybrid maize and sugarcane ◆ Technology developed- climate resilient rice-wheat cropping system, ground water recharge system and production of rice straw based mushroom ◆ Publications- Research article in journal (237), books (26), book chapters (80), training manuals (05), Policy papers (03) and Technical/research bulletins (16). ◆ Five patents filed during the reporting year. ◆ A total of 17 new externally funded projects received at a budget of Rs. 49.02 Crores. ◆ Started six centre of excellence/Advanced Centers of Research on water management, climate change, food processing, mushroom, wealth from waste and start-up facilitation ◆ Established - Central instrumentation facilities, Bamboo processing centre and Advance agro-metrological centre ◆ Scientific waste management of house hold waste and floral offering of temple Baba Dham (Deoghar (Jharkhand) and Garibnath, Muzaffarpur (Bihar) ◆ Utilization of green energy in and off the farm activities utilizing solar energy ◆ Made to final list of Green University of Asia Pacific region award- 2020 by Accreditation Council for Entrepreneurial and Engaged Universities, Asia Pacific, Amsterdam
EXTENSION	<ul style="list-style-type: none"> ◆ Established four new KVKs and staff recruitment process initiated ◆ Delivered 52 Radio/TV talk ◆ Conducted 5730 FLDs and 85 OFTs. ◆ Conducted 15 technology assessment trials. ◆ Organized kisan mela- one in campus and another at Madhubani ◆ A total of 3576 farmers got benefitted by different trainings and Kisan Mela. ◆ Strengthened Kisan call Centers
ADMINISTRATIVE/ INFRASTRUCTURE	<ul style="list-style-type: none"> ◆ Promoted- 113 faculty/scientist, 12 supporting staff and recruited- 65 technical staff. ◆ Administrative reform by restructuring and rationalizing staff structure ◆ Construction completed- Department of Horticulture buildings, Three research centre buildings, 72 Type II quarters, one girl's hostel and renovation of Boys hostel. ◆ Construction progressed- Boys and Girls' Hostel, administrative building of Horticulture & Forestry college at Piprakothi, Centre of Excellence for Embryo Transfer Technology at Piprakothi, University hospital and School of Agri Business & Rural Management. ◆ Revenue generation increased by 30% through consultancy, testing, licensing, training and selling of agri-produce. ◆ Accounts of 2018-19 audited by CAG after approval of Finance Committee and University Board of Management.

ORGANIZATIONAL STRUCTURE

Executive Bodies of University :

- ◆ Board of Management
- ◆ Finance Committee
- ◆ Academic Council
- ◆ Research Council
- ◆ Extension Education Council

University Administration :



Visitor	: Shri Ramnath Kovind, Hon'ble President of India
Chancellor	: Prof. P. K. Mishra
Vice-Chancellor	: Dr. Ramesh Chandra Srivastava
Registrar	: Dr. Ravi Nandan
Director of Education	: Dr. M.N. Jha
Director of Research	: Dr. Mithilesh Kumar
Director of Ext. Education	: Dr. M. S. Kundu
University Librarian	: Dr. Rakesh Mani Sharma
Director Students Welfare	: Dr. A. K. Mishra
Comptroller	: Shri. Radhakrishna Prasad

Deans/ Directors of the College/Institutes :

Dr. K. M. Singh	Dean, PG College of Agriculture
Dr. Somnath Roy Chowdhury	Dean, College of Basic Sciences & Humanities
Dr. (Mrs.) Meera Singh	Dean, College of Community Science
Dr. Krishna Kumar	Dean, Pt.DDU College of Horticulture & Forestry (Piprakothi, Motihari)
Dr. Ambrish Kumar	Dean, College of Agricultural Engineering
Dr. S.C. Rai	Dean, College of Fisheries Dholi, Muzaffarpur
Dr. A. K. Singh	Dean, Tirhut College of Agriculture, Dholi, Muzaffarpur
Dr. A. K. Singh	Director, Sugarcane Research Institute
Dr. R. C. Rai	Director, School of Agribusiness & Rural Management
Dr. S. K. Jain	Director, Building and Infrastructure
Dr. R. S. Verma	Director, Plant and Facilities
Dr. Arti Sinha	Director Planning

Education

The University continued to impart quality education in 6-disciplines of UG, 24-disciplines of PG and 10-disciplines of PhD programme through network of its 8 colleges viz. TCA, Dholi, PG College of Agriculture, Colleges of Agricultural Engineering, Basic Sciences & Humanities, Community Science, Fisheries, Horticulture & Forestry and School of Agri-business & Rural Management wherein 546 students got enrolled (UG-277, PG-242 and 27 in PhD) and 187 students passed out and awarded with Graduate (72), Post Graduate (105), and Ph.D (10) degrees. A total of 96 students of the university cracked different national level examinations like SRF/JRF/GATE/NET and National Fellowships, *etc.* Approximately 50% of our MBA/Rural management and 25% undergraduates/post-graduate students got placed in reputed organizations/companies of the country despite of the recent COVID-19 lock down effect.

The university has created conducive environment of academic and research work through development of State of the Art facilities and services like smart classes, digital library, well equipped laboratories, faculty up-gradation, capacity building and anti plagiarism mechanism to ensure quality education and research. A centralized hassle free, cashless, single window admission process has been introduced and an effective monitoring system for various academic activities right from admission to result declaration has been implemented. As part of HRD development faculties were allowed to attend 35 Seminars, 66 Conferences, 73 Workshops and 64 Trainings. A Faculty Induction Programme was also organized during 1st to 21st August, 2019 for newly appointed 51 Assistant Professors/Scientists.



Activities of Faculty Induction Programme



Centralized Admission System

Students Admissions/pass out at a glance

Name. of Programme	Intake capacity	Admitted	Retention	Passed Out
UG	319	277	238	72
PG	276	242	204	105
Ph.D	32	27	25	10

*The number of pass out is low as they entered during SAU period when intake was low.

Industry and foreign students

The University-Industry linkage is strengthened by providing 5% of seats as supernumerary seats over and above the total intake in different disciplines of PG and Ph. D programme. Further, education is strengthened by opening the avenue of admission of foreign students in different disciplines of Post Graduate and Ph.D Programme.

Initiative for Academic Reform

The academic management system has been introduced for monitoring of academic activities right from registration to result declaration. Under NAHEP programme, the implementation of e-governance in the university has been initiated. To ensure academic integrity and purity anti plagiarism regulations has also been introduced. To promote faculty and student exchange with other National/International Institutes of repute, MOU has been signed with the University of Australia, Bioved Research Institute, Prayagraj & Institute of Horticulture Technology, Noida.



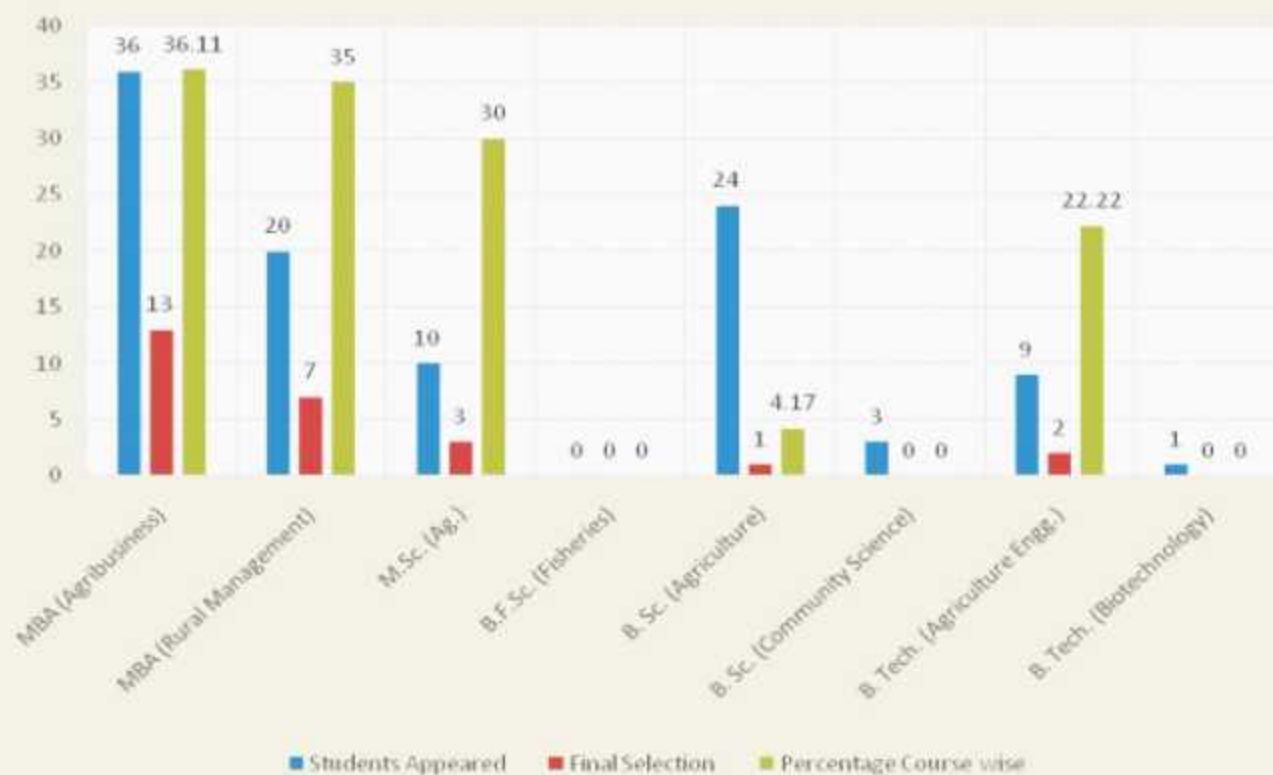
Agriculture Education Day, 2019

The birthday of Bharat Ratna Dr. Rajendra Prasad, the first Agriculture Minister as well as President of India, Dr. Rajendra Prasad Central Agricultural University, Pusa was celebrated as '**Agriculture Education Day**' on 3rd December, 2019 across its campus with great delight and enthusiasm. The Programme was inaugurated by Hon'ble Vice-chancellor Dr. R.C. Srivastava. In the inaugural address, Hon'ble Vice-Chancellor emphasized the brilliance of Dr. Rajendra Prasad and his academic career, his down to earth attitude and "simple living high thinking" principle of life and appealed the students and faculties for adoption of these moral values in their personal and professional life.

Placement @ RPCAU Pusa



Placement distribution



Resource Generation

The University has generated revenue of Rupees 08.61 Cores on account of providing various products & services viz. consultancies, testing, tuition fees, licensing, trainings and through sale of seeds and other products. University has produced approximately 390.568 tonnes of seed with just 4.55% becoming non-seed which speak volume about good management practices adopted in seed production programme.

Research

The university puts major efforts in development of technologies and crop varieties suitable for different agro-ecological conditions through various operational research projects. The expenditure of the university sponsored projects is being met out from the internal revenue generated by the university. The summary of the operational research projects has been presented here.

Sl No.	Funding Agencies	Number of projects
1	Indian Council of Agricultural Research (Co-ordinated)	36
2	International	05
3	Govt. of India sponsored	07
4	Govt. of Bihar funded projects	05
5	University funded projects	59
6	Others	02

Technologies Released

The Rice-Wheat cropping system under changing climatic scenario

The most predominant rice-wheat cropping system is getting vulnerable to various climatic extremities like erratic rainfall for the rice crop and the terminal heat stress for the wheat crop. The advanced nursery sowing of rice by the 25th May and transplanting by the 15th June allowed it to get harvested by the 10-15th October and proved the crop productive. After rice, wheat was sown by the 10th November which resulted in early harvesting and saved from the threats like hailstorm, westerly wind and the terminal heat stress.



Impact of tillage and nutrient management practices on kharif-maize, Rabi Maize & kharif-rice

Permanent bed planting coupled with the site-specific nutrient management (SSNM) practices were proved to be beneficial for enhancing yield, soil health and economics in kharif-maize, rabi-maize and kharif-rice.



Temple waste management

The heavy deposition of flowers and Bael leaves offered to Lord Shiva in temples like *Baba Baidyanath* temple, Deoghar (Jharkhand) and *Baba Garibnath* temple, Muzaffarpur creates a serious threat to the environment in the premises as well as in the vicinity besides degrading the aesthetic beauties. In association with Indian Institute of Soil Science, Bhopal and KVK, Sujani (Deoghar) and the respective temple trusts, these floral offerings are now



being converted into vermicompost and its selling has fetched revenue of Rs. 4.00 lakh in three months. This model of waste management has been widely appreciated to bring cleanliness to temple.

Ground Water Recharge Structure Unit

Ground water recharging can be done using surplus runoff water available during monsoon season. Keeping the importance of ground water recharge and drainage of excess water a recharge structure has been designed and developed at RPCAU, Pusa. The system recharges about 6.5 lps of filtered water to second aquifer.



Eco-Herbal Gulal

In light of the initial spread of contagious COVID-19, the university issued advisory for using the organisation-made Eco-herbal gulal colours with floral and herbal extracts during Holi festival. One-day Awareness Camp on Eco-Holi colours was organized in the University by the Department of Textile and Apparel Designing, College of Community Science on the 6th march 2020 for popularising these products. Yellow colour was extracted from Haldi (*Curcuma longa*) and Marigold (*Tagetes erecta*), Orange from annato seeds (*Bixa orellana*), golden yellow from palash flower (*Butea monosperma*), green from seim, sadabahar (*Catharanthus roseus*), and neem leaves (*Azadirachta indica*). Natural fragrances of rose, lemon grass, etc were blended. Different shades of all the colours i.e., light, medium to dark were developed. The product was widely appreciated by local residents and enquiry was sought by shopkeepers of nearby towns.



Variety Released

The university puts its every effort for developing climate resilient and high yielding varieties for the benefits of the farming community. Seven improved varieties, viz Rajendra Gehun-1&3 (wheat), Rajendra Saraswati (Paddy), Rajendra Ganna - 1 (Sugarcane), Rajendra Dhania - 1&2 (Coriander) and Rajendra Hybrid Makka - 1 (Maize) have been released by CVRC/SVRC.



Rajendra Saraswati



Rajendra Gehun-3



Rajendra Ganna - 1



**Rajendra
Dhania-1**



**Rajendra
Dhania-2
(RD-377)**

One day Brain Storming Session on **“Policy for Rejuvenation & Conservation of Wetlands in Bihar”** on 2nd February, 2020 was organised on the occasion of World Wetland day at RPCAU, Pusa, Samastipur (Bihar). During the inaugural speech, Chairman of this programme, Dr. R. C. Srivastava, Hon'ble Vice Chancellor, RPCAU Pusa stated that wetlands are vital parts of the natural ecosystem. They serve an array of functions like flood mitigation, erosion control, ground water recharge, micro climate regulation and aesthetic enhancement of landscape. Shri Dipak Kumar Singh, IAS, Principal Secretary, Environment, Forest & Climate Change, Govt. of Bihar, the Chief Guest of the function shared his experiences on rejuvenation and conservation of wetland. The program was attended by senior government officials of Govt. of Bihar, Govt. of India, and Scientists of nearby ICAR research institutes, IIT & NIT, Patna besides faculty members of University.



Extension:

Kisan Mela 2020 at RPCAU, Pusa

The Kisan Mela-2020 with a major theme 'Agricultural Waste Management for Rural Livelihood' (ग्रामीण जीविकोपार्जन हेतु अवशिष्ट प्रबन्धन) was organized by the University during February 16-18, 2020. The Mela was inaugurated by Shri Maheshwar Hazari, Hon'ble Minister, Planning & Development, Govt. of Bihar. He visited all the stalls and interacted with the farmers. On 2nd day, Shri Kailash Choudhary, Hon'ble Minister of State, Ministry of Agriculture & Farmers' Welfare, Govt. of India, New Delhi addressed the farmers during the Kisan Mela. On the third day, Shri Giriraj Singh, Hon'ble Minister for Fisheries, Animal Husbandry & Dairying, Govt. of India, New Delhi was chief guest during the valedictory function. He visited all stalls as well as addressed the farmers.



Technology and Machinery Demonstration Mela

CAE, Pusa organized one day "Technology and Machinery Demonstration Mela" on February 14, 2020 at Watson School Ground, Madhubani (Bihar). The organization of Mela was financially supported by AICRP on FIM and also ATMA, Madhubani.

The programme was inaugurated by Dr. R. C. Srivastava, Vice-Chancellor, RPCAU, Pusa as Chief Guest. He addressed upon the need of mechanization for



small farmers as well as women friendly machineries. The other dignitaries were Shri Buddh Prakash, DCLR, Madhubani, Shri Sudhir Kumar, District Agriculture Officer, Madhubani. About 900 farmers from different parts of Madhubani and Darbhanga districts participated and about 25 tractor and machinery manufactures/dealer were exhibited their latest machinery in the programme.

Few glimpses of the KVK extension activities

The extension activities were carried out by 16 KVKs along with by the various colleges through AICRPs and other projects. The consolidated details of extension activities are tabulated as follows:

Extension Activities at a glance

Activities	No. of event
Farmers fair	02
Farmers Training	138
FLD	5730
OFT	85
FCS	246
AEO	10
TV/Radio Talk	52
Technology Assessment	153



3rd Extension Education Council meeting of the RPCAU, Pusa held on 25th May 2019



Celebration of Rakhi festival and plant distribution among farmers by Ex Union Ag. Minister of India and Hon'ble MP of East Champaran (Shri Radha Mohan Singh) at KVK Piprakothi



Hon'ble Agriculture Minister Shri Prem Kumarji, Govt. of Bihar, visited KVK Piprakothi (1 Nov 2019)



KVK Piprakothi organized an exposure visit at RPCAU, Pusa for trainees of 15 days INM training program. Trainees visited different demonstration units established at the university campus. (27 Nov 2019)



Hon'ble CM Nitish Kumar ji visited KVK Siwan, stall. (5 Dec 2019, Siwan)



The QRT for ATARI, Zone-IV & V (Kolkata & Patna) visited RPCAU, KVKs for reviewing their activities & achievements of KVKs during 2011-19, from 10-13 December 2019



Inauguration of Exhibition Center and Seed Sale counter by MP, Motihari and Ex Agriculture Minister, GOI, at KVK Piprakothi. (15 Dec 2019).



Field demonstration of vegetable planter, University roadmap for academic research & extension presented to Hon'ble CM Shri Nitish Kumar at Rajnagar Madhubani on Jal-Jivan-Hariyali fair.

Rajbhasha Hindi Pakhwada Celebration

The University celebrated *Hindi Pakhwada* from 11.09.2019 to 24.09.2019. During this period different competition viz. essays, debate, *antakshari*, general knowledge, paintings were organized among Hindi and non-Hindi speaking students and faculties separately. Hindi technical article competition among teachers/scientists & Hindi official notes writing competition among administrative/supporting staff were also organized besides a *Kavya Gosthi* on 24.09.2019 with the help of artist from AIR, Patna. The valedictory function was held on 25.09.2019 wherein 66 winners of different competitions (60 students / 03 scientists and 3 administrative/supporting staff) were awarded with certificate and memento by the Hon'ble Vice Chancellor, Dr. R. C. Srivastava.

CENTRAL FACILITIES

University Library

- ◆ The brief of achievement made during the reported period is as under-
- ◆ The total footfalls recorded in library were **44,134**.
- ◆ A total of **10798 documents circulated** (5396 issued and 5402 returned) to support the academic/research activities of the students.
- ◆ Under outreach connectivity programmes with users, the two branch libraries (TCA Dholi and College of Fisheries) were connected to the main library through Koha-ILMS.
- ◆ The Online Public Access Catalogue (OPAC) depicting complete collection of learning resources made Web PAC for anytime/anywhere access and use.
- ◆ A total **1315 books** (1020 printed and 315 e-books) purchased to enrich learning resources
- ◆ Online anytime/anywhere access provided to **3500+ scientific e-journals** and **1716 e-books PDF copies** downloaded from different publishers to combat covid-19 effects on learning resources usage.
- ◆ A sum of **Rs 48.52 Lakh** was spent on enriching learning resources/service and library has generated revenue of **Rs 12.21 Lakh** (10.57 Library discount and 1.74 Lakh on account of providing various library services.
- ◆ Two training programmes organised one on “J-Gate” and other one on “Turnitin” for students and faculty for promotion of e-journal usage and academic integrity respectively on 25th and 26th March 2020.



ARIS Cell

ARIS Cell of the University Headquarter Campus as a central facility extended its services for the entire university by setting up the linkages among all departments, research and extension units and all the colleges. Besides,

- ◆ Created University E-mail accounts and Internet accounts for all the students and newly joined staff.
- ◆ Day-to-Day maintenance of University Local Area Network.
- ◆ Maintenance of computer system.
- ◆ Maintenance of University Website and daily updating activities.
- ◆ Monitoring of user traffic through Unified Threat Management application.
- ◆ Content publication through Digital Notice Boards.
- ◆ Organizing computer proficiency test for various posts advertised.
- ◆ Skype interviews for placement
- ◆ Lying of OFC to connect newly constructed research centre, SRI and other academic buildings.

University Gymnasium



A well equipped gymnasium was established in University campus for use by students as well as residents.

Awards and Honours:

A total of 79 awards of different levels (1 International, 72 National and 06 state levels) of different societies/associations and organizations were received by the faculty/Scientists of the University for their academic and research excellence.

Awards of Vice-Chancellor

1. Lifetime Achievement Award, 2019 (International Scientist Awards on Engineering, Science and Medicine) by VDGOD Professional Association, South India Branch, Chennai (14.09.2019).
2. ISAE Gold Medal (07.01.2020) 54th ISAE Annual Convention held at Pune.
3. 2020 Asia-Pacific Triple E Awards at Marriot Hotel, Kochi, Kerala (**Institutional Award**).
4. Vishwa Kavi Rabindranath Tagore Memorial Award (2020). Honoured during 43rd Annual International Conference on Oriental Heritage at Ravindra Bhawan Auditorium, 540 Dum Dum Road, Kolkata on 7th February, 2020.
5. Honorary Fellow of AIF. Honoured during Workshop on Promoting and Recognizing Agri-Innovations in U.P. at IISR, Lucknow on 27.02.2020.



Students Corner :

(Alumni meet, Annual sports /Cultural fest)

CAE Alumni meet 2019

Along with foundation day, a 2-day Alumni Meet was also organized during 7-8th December 2019 aiming to strengthen the bond among the alumni and to establish professional tie-up among the likeminded friends. About 100 alumni with spouses across the country participated in the meet, starting from first batch (1983-1987) to latest batch (2015-2019).



Student Welfare Activities

Annual Sports meet 2019

Annual Inter College Games and Sports meet 2019-20 of RPCAU, Pusa was held at the sport complex ground of University from the 1st Dec to 3rd Dec 2019. Altogether 268 students including 129 girls from eight different colleges participated in 20 different track & field events including Badminton, Table tennis, Kabaddi and Volleyball (Boys). Hon'ble Vice Chancellor along with Director Students' Welfare, Deans and Directors of the University participated in prizes distribution ceremony on the 3rd of December the gracious occasion of the foundation day of the University.

Participation in the AGRI-SPORT 2019-20

A contingent of 36 players of university students (23 boys and 13 girls) participated in XX All India Inter - Agricultural Universities Sports & Games Meet 2019-20 (Agri-Sport 2019-20) held at Sri Venkateswara Veterinary University, Tirupati, A.P. from the 1st to 5th, March 2020.

Participated in the 20th AGRI-UNIFEST, 2019-2020

Twenty-two students of the University participated in the 20th All-India Inter-Agriculture Universities Youth Festival (Agri UniFest) 2020 hosted by Indira Gandhi Krishi Vishwa Vidyalaya, Raipur (Chhattisgarh) from 8-12 February, 2020. Mr. Sidhant Kumar Saurav and Mr. Vineet Anand won the second position in quiz competition and were awarded with silver medal.



NCC Activities



26th January, 2020



Tree plantation



Promoting clean India campaign



Human chain in Jal-Jeeban-Hariyali

New Additions and Initiatives



Three Research Buildings at RPCAU, Pusa campus



Bamboo processing centre & Irrigated bamboo plantation



Inauguration of Parking shed and Shopping Complex



Inauguration of New Building of Library, RAS and Foundation stone for Establishment of Freshwater Prawn Hatchery at COF, Dholi



Inauguration of Dinkar Boys hostel at COF, Dholi



Meteorological Observatory established and inaugurated at RPCAU Pusa



**Inauguration of Water Management Building &
Solar Powered irrigation at Pier village**



ELP on Beekeeping and Honey Production, TCA Dholi



ELP on Mushroom, TCA, Dholi Centre



Children Park and staff club at RPCAU, Pusa Campus



Butterfly garden, Permaculture in Dhab area for Sustainable Livelihood



Inauguration of Sugarcane Juice Counter & Gur Processing centre at SRI

Financial Overview : (Rs. in Crore)

Sl. No.	Particular	Received From				Received Total	Expenditure
		DARE	ICAR	State Govt.	University Receipt		
01	Grant-in Aid Salary	80.00	11.125 (KVK)	-	-	91.125	91.125
02	Grant-in-Aid General	09.55	2.1276 (KVK)	-	-	11.6776	11.6776
03	Grant-in-Aid Capital	100.00	2.97 (KVK)	-	-	102.97	102.97
04	ICAR-AICRP(General)	-	3.377	-	-	3.377	3.377
05	ICAR Education Division	-	3.845	-	-	3.845	3.845
06	Other/Misc.	-	-	50.00	08.61	58.61	58.61
	Grand Total	189.55	23.4455	50.00	08.61	271.605	271.605

How we coped with COVID-19



(Pedal based hand wash machine, boom spraying inside the campus, mask making & distribution and thermal scanning of visitors respectively)



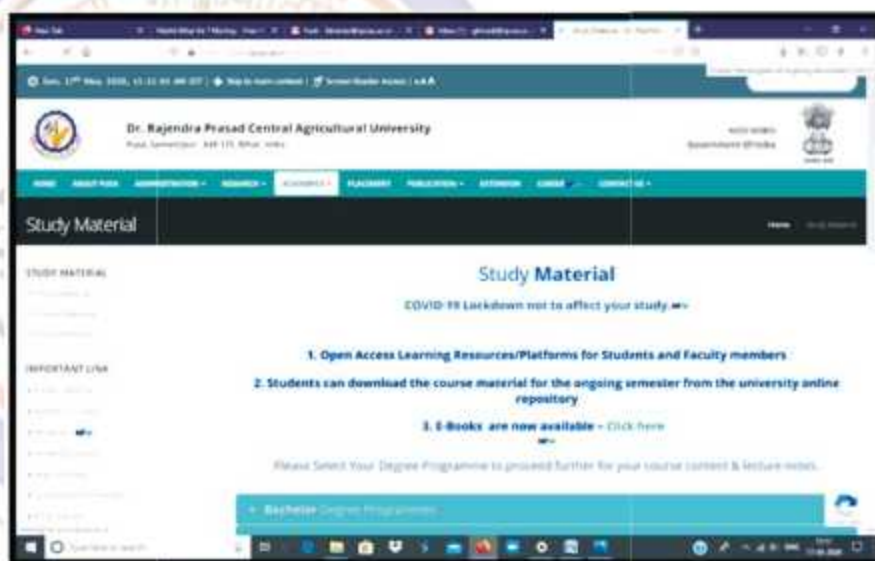
Barricading and vehicle sanitization at campus entry gate

Education and Research Support in COVID-19 Lockdown

- ◆ Google Classrooms, Whatsapp Group, Online-classes



- ◆ e-Books, Course Materials and Open Learning Resources shared on the RPCAU Website



- ◆ Remote access facility of CeRA Consortium - Anytime/Anywhere





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