MPUAT ACHIEVEMENTS

The major achievements accomplished in education, research and extension education during last ten years are summarized below:

1.1 New Colleges Started

- **College of Horticulture & Forestry, Jhalawar:** Jhalawar was started from academic year 2004-05 with separate undergraduate programme in (i) Horticulture and (ii) in Forestry; The P.G. Programme in Horticulture was launched in 2007-08.
- **College of Fisheries, Udaipur:** Udaipur was started in 2004-05 with UG Programme in Fisheries Science and PG Programme in Aquaculture, by upgrading the department of Limnology and Fisheries of RCA, Udaipur. These programme were discontinued for want of formal approval by the state government. However, the state government has granted formal approval to start the college from 2010-11. Fresh admissions are made for academic year 2010-11.

1.2 New Departments Established

The new Department of Molecular Biology and Biotechnology (MBBT) was established in RCA in 2005-06. The Following new Departments were established in COH&F, Jhalawar.

- Department of Fruit Science
- Department of Vegetable Science
- Department of Floriculture & Land Searping
- Department of Post Harvest Technology
- Department of Plant Protection
- Department of Agro Forestry & Silviculture
- Department of Forest Produce Utilization
- Department of Forest Biology & Tree Improvement
- Department of Basic Sciences

1.3 New Programme Started:

1. BE in Computer Science Engineering at CTAE in 2000
2. BE in Electronic & Communication Engg. at CTAE in 2006
3. BE in Information Technology at CTAE in 2007
4. BE in Civil Engg. at CTAE in 2007
5. M.Sc. in Molecular Biology & Biotechnology at RCA in 2005-06
6. MBA in Agribusiness at RCA in 2009-10
7. Ph.D. in Textiles & Apparel Design in 2009-10 at College of Home Science, Udaipur

1.4 Special Cells Establishment

(i) University Seed & Farms Cell in 2004-05

(ii) Socio-Economic and Ag. Policy Planning Research Cell 2004-05

(iii) Climate Change Study Cell 2009

(iv) Intellectual Property Right Cell 2009

1.5 University Convocations Held

College Convocations

For RCA, COF & COH&F on 16.1.2010 Bachelor's Degrees Awarded: 276 For CTAE, CDFST & COHS on 19.1.2010 Bachelor's Degrees Awarded: 811

First on 16.3.2002	Degrees Awarded Bachelors – 203, Masters, 174 Ph.D -39 and Gold Medal-40
Second on 31.3.2003	Degrees Awarded Bachelors-241, Masters-106 Ph.D-64 and Gold Medal-16
Third on 31.3.2004	Degrees Awarded Bachelors-245, Masters-102 Ph.D-51 and Gold Medal-23
Fourth on 16.10.2006	Degrees Awarded Bachelors-892, Masters-220 Ph.D-105 and Gold Medal-55
Fifth on 12.3.2010	Masters-236 Ph.D-110 Gold Medal-27

1.6 Quality Improvement in Education.

- Revised Course Curricula at UG level as per Fourth Deans Committee of the ICAR implemented in all colleges from 2006-07 academic year.
- Revised Course Curricula at PG and Ph.D. level as per Katyal Committee of the ICAR implemented in all disciplines from 2009-10, academic year.
- Adoption of new RAWE/ In-plant training model including industrial attachment of students in agricultural faculty.
- Adoption of professional courses in Home Science faculty on 2 +2 pattern for graduates.
- Promotion of e-learning at UG, PG & Ph.D levels.
- Emphasis on practicals and hands-on-practice in all disciplines.
- Strict adherence to attendance to the extent of 75% and regular monitoring of attendance.
- Regular revision of practical manuals.
- Implementation of Adjunct Professors Scheme in different disciplines.
- Special lectures through experts in different areas of specialization
- Constant monitoring of classes by Heads of department and Deans in person and through CCTV.
- In order to ensure more and more hands-on-practice and practical knowledge, the ICAR extended support for establishment of experiential learning centres in different disciplines. These include (i) Renewable energy sources at CTAE. (ii) Processing and value addition of agricultural products at CTAE. (iii) Apparel production management at College of Home Science. (iv) Bio-Control at RCA. (v) Processing centre for food and vegetable and development of mixed food at CDFST and (vi) Specialty food like high protein food, health food and milk food at CDFST, Udaipur.
- MPUAT is one amongst the few institutions in the country to deploy a Gigabit campus networking providing 4 Mbps leased line connectivity. Every faculty member has a personal computer on his disk. While all faculty members and students have access to internet connectivity in their Departments as well as college library, all hostels are provided with internet/intranet connectivity either through Wi-Fi network or through optical fibre cable for 24 hours of the day. Around 1000 IT based information outlets are provided in different colleges and hostels of the University. The digital university project, which is an effort to bring e-governance in higher education, is being implemented in collaboration with Maharashtra Knowledge Corporation Ltd, Pune.
- Library information system at MPUAT is partially automated, bar-coded and digitized. All *bonafide* members of the University are provided various facilities and services, such as document alert service to know about the receipt of new publications, off-line databases through Standalone CD-ROM databases, on-line databases through Internet and Intranet facilities to retrieve and download research information, on-line Journals:
- The exposure visits by faculty members for attending international symposia, global conferences, international training programmes, fellowship programmes advance courses etc are being encouraged by the University.
- In order to update the subject matter knowledge of teachers, the global knowledge bowl is made accessible to all our teachers on their desk itself through ICT applications. Besides, more than two dozen winter/summer schools have been organized by the constituent colleges in areas of advanced studies in different disciplines. Opportunities were also made available to a large number of our young faculties to participate in such programmes in their own Departments. Besides, all desirous teachers are being deputed to other reputed organizations where such programmes are arranged.
- In order to improve quality of education, to strengthen collaborative research and to harness the advantages of inter-institutional linkages the university has entered into memorandum of understanding

with large number of reputed Organizations /Institutions.

- The Accreditation Board of the ICAR granted accreditions for UG, PG and Ph.D programmes of Rajasthan College of Agriculture, College of Technology & Engineering, College of Home Science and College of Dairy and Food Science Technology, Udaipur, for a period of five years in 2009. In addition, the teaching programme at College of Technology and Engineering as well as College of Dairy and Food Science Technology are also duly recognized by AICTE. These recognitions by apex bodies have given us new impetuous to surge ahead in fulfilling obligations of a quality educational hub in the domain of agriculture, its allied fields and technology.

	Pratap Mungphali-1, TG-37-A, Pratap Mungphali-2
Soybean	Pratap Soya-1
Cotton	Pratap Kapi-1
Foxtail Millet	Meera (SR-16), Pratap Kangni
Barnyard Millet	Pratap San wa-1
Proso Millet	Pratap Chee na-1
Horsegram	AK-21, Pratap Kulthi -1
Linseed	Pratap Alsi 1, RL 914

1.7 Research Accomplishments

Directorate of Research (DoR), a constituent unit of "Maharana Pratap University of Agriculture and Technology" Udaipur was established in 1999 with its headquarters at Udaipur to cater the research needs of the south and south eastern parts of Rajasthan. Research activities are funded by the State Government, Government of India, Indian Council of Agricultural Research and other agencies. Currently there are 44 centres of AICRP/ Network Projects funded by the ICAR and State Govt on 75:25 basis aimed to address issues related to crop improvement, crop production, protection management of major crops, agricultural engineering, home management, animal husbandry, natural resource management, etc. Besides about 60 time bound adhoc research projects funded by the ICAR, NAIP, Technology Missions, DBT, DST, NOVOD, IMD, RSSC, RWSRP, GOR, NHM, RKVY, Private sector, etc are in operation at various constituent units of the University. There are established cells (i) Cell for Seed & Farms to coordinate quality seed production by the university (ii) SEAPPRC Cell for Socio Economic and Agricultural Policy Planning Research (iii) IPR Cell for Intellectual Property Rights.(iv) Climate change study cell, etc to focus on there multi faculty activities.

Varieties Released Other Technologies

- Resource conservation technologies evolved for maize, wheat and black gram
- A large number of production enhancement technologies have been developed and disseminated for crops like maize, soybean, paddy, black gram, french bean, cluster been, cotton, sesame, sorghum, wheat, barley, chickpea, mustard and so on.
- Effective and integrated nutrient management technologies have been developed for maize, wheat, sorghum, chickpea, soybean, pigeon pea, etc.
- Cost-effective and user friendly plant protection measures for crops like maize. sorghum, soybean, mustard, chickpea, and cotton have been generated
- Location specific production, protection technologies have been evolved for horticultural crops

	Varieties
Maize	Aravali Makka-1, Pratap Hybrid Maize-1, Pratap Makka-3, Pratap Makka-4, Pratap Makka-5, Pratap Kanchan-2, Pratap Makka Chari-6
Shorghum	SPH-837, CSV-17, Pratap Jowar-1430
Chickpea	Pratap Chana-1

like guava, mango, cauliflower, brinjal, chillies, potato, onion, sweet potato, cabbage, cauliflower opium

poppy, coriander, garlic, turmeric, colocassia etc.

- The agricultural engineering technologies evolved by the university include whole crop maize thresher, garlic processing equipment, garlic bulb breaker, machine for dewatering and de-pumping of tumba, aonla processing, community solar cooker, horizontal bio-gas plant, modified janta biogas, maize rub, Value addition of alovera, etc.
- Drudgery reduction technologies for farm women, measures for economic empowerment of women etc have been evolved through home science research.
- The university has been contributing towards policy intervention measures by GoI through MSP for crops like bajra, maize, sorghum, cotton, soybean, sesame, green gram, black gram, wheat, barley. chickpea and mustard.

1.8 Achievement of Extension Education

Towards the objective of the **"reaching the unreached"** Directorate of Extension Education has been organizing trainings to up-date the knowledge of extension personnel in emerging areas of science and technologies, takes up long term vocational training courses in agriculture and allied vocations for the unemployed youth with emphasis on "**learning by doing**", develop linkage mechanism between Research and KVKs for transfer of latest technical know-how, makes available farmers feed back to the research system and brings out publications covering latest technologies and materials for the use of farmers. The 10 KVKs under the Directorate of Extension Education have the specific mandate of conducting "on farm testing" for identifying technologies in terms of location specific sustainable land use systems, organizing training to update the extension personnel with emerging advances in agricultural research on regular basis, organizing short and long-term vocational training courses in agriculture and allied vocations for the farmers, farm women and rural youth with emphasis on **"learning by doing"** for higher production on farms and generating self employment and conducting frontline demonstrations on various crops to assess production performance and feedback information

Innovative Extension Interventions

Training for School Dropouts & Rural Youth: With the aim to generate employment opportunities and livelihood security for school drop-outs and rural youth, specialized short and long duration vocational training courses are being organized in the field of seed production, mushroom production, nursery raising, vermin culture and composting, maintenance and repair of farm machines & implements, apiculture, milk processing, cultivation of medicinal and aromatic plant, fruit & vegetable preservation, agro-forestry, goat rearing, stitching, embroidery, repair and maintenance of tractor, motor rewinding, etc. **Agri-clinic and Agri-business Training:** The Directorate regularly has been taking the challenging task of orienting agricultural graduates to become **job-producers** through agri-climic and agri-business training of 60 days duration in specialized areas. **Agricultural Technology Museum**: It depicts teaching, research and TOT activities and achievements of the university at one place **Training of educated unemployed youth:** The eight days trainings under Prime Ministers "Rajkar Yojana" for educated unemployed youth in areas such as crop production, horticulture, animal husbandry, agricultural engineering, home management, renewable energy, food processing and value addition besides banking and managerial skill is a regular feature. **Village Adoption Programme:** For integrated agricultural development of villages, each KVK has adopted ten villages and in all 100 villages have been adopted by the 10 KVKs where efforts are directed for demonstration and dissemination of technologies. Out of the 10 villages selected by each KVK, one village has been developed as **MODEL VILLAGE,** depicting all the technological interventions feasible for the agro-climatic conditions of the area. **Integrated Village Development Project:** An innovative Integrated Village Development Project with integrated farming system approach has been implemented with the goal of transformation of villages for socio-economic upliftment of tribals of southern Rajasthan. The project was funded by Deptt. of Tribal Area Development, GOR. A basket of 18-28 technologies were taken to 18 tribal villages of three districts viz. Banswara, Dungarpur and Udaipur. **NAIP on Livelihood & Nutritional Security in Tribal Area:** The Directorate of Extension Education is the Lead Centre of NAIP Project "Livelihood and Nutritional Security of Tribal Dominated Areas through Integrated Farming System and Technology Models" being operated in a consortia mode in four most backward districts of the state i.e. Banswara, Dungarpur, Udaipur and Sirohi. Integrated Farming System models based on Horticulture and Animal Husbandry are being adopted by 14000 families in 10 clusters of 50 villages in these four districts.

Video Conferencing System: It links KVKs of the University with the H.Qs to improve quality of training imparted by KVKs.