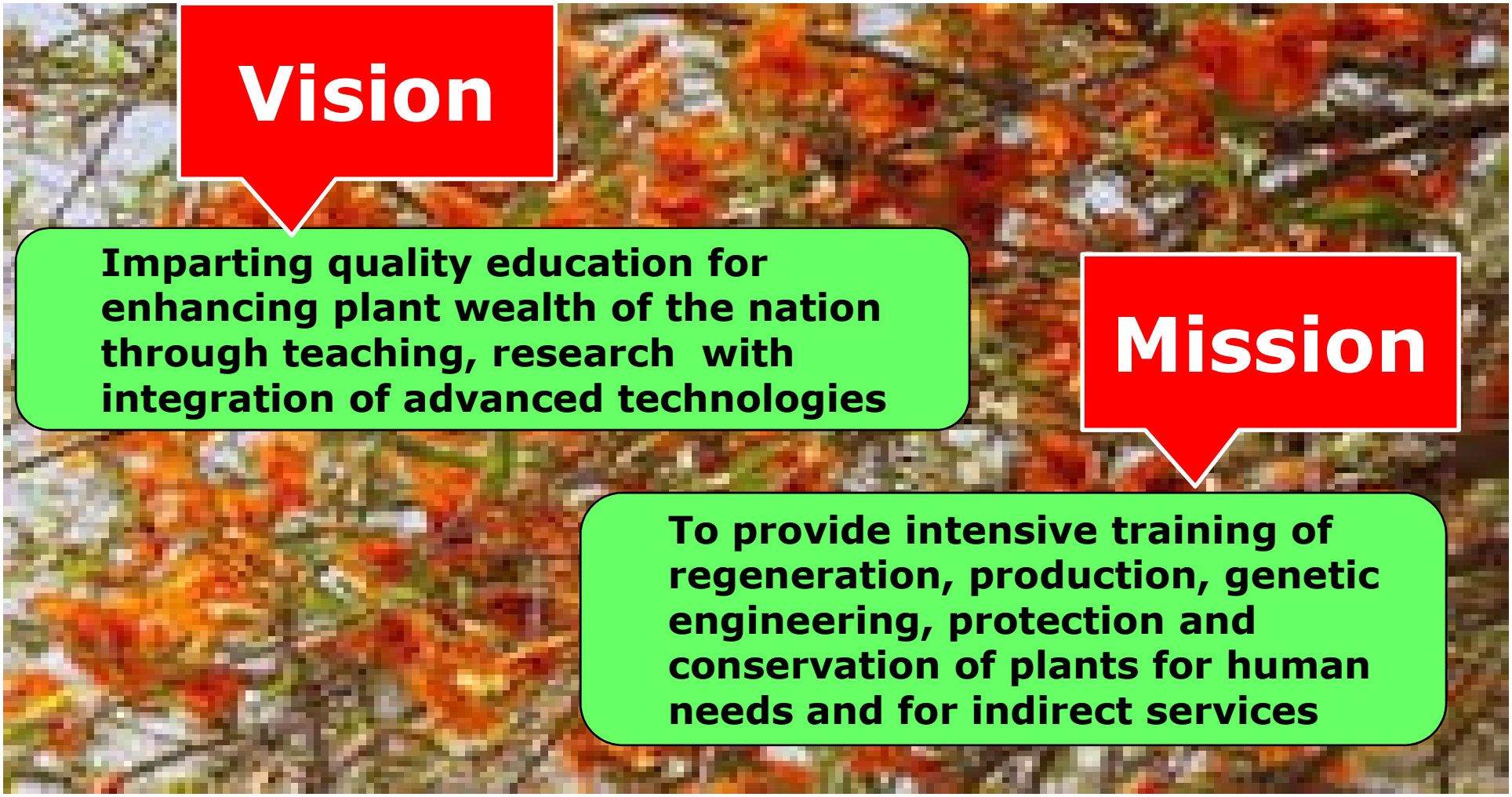
Cordially Welcomes

Dr. Arvind Pareek
Professor and Head

Vision and Mission



Vision

Imparting quality education for enhancing plant wealth of the nation through teaching, research with integration of advanced technologies

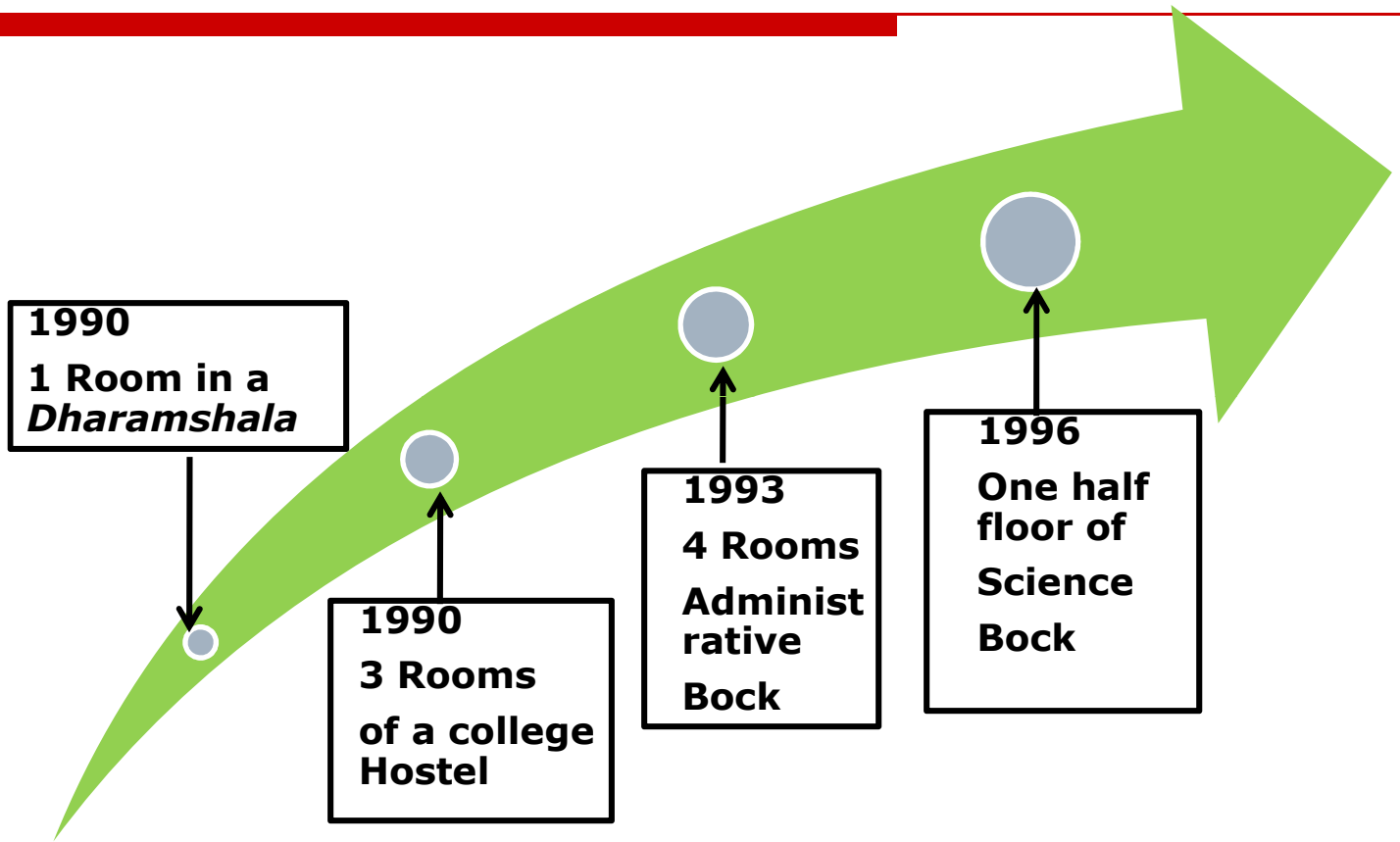
Mission

To provide intensive training of regeneration, production, genetic engineering, protection and conservation of plants for human needs and for indirect services

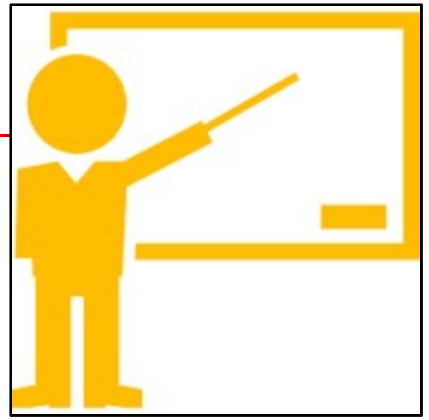
First Message

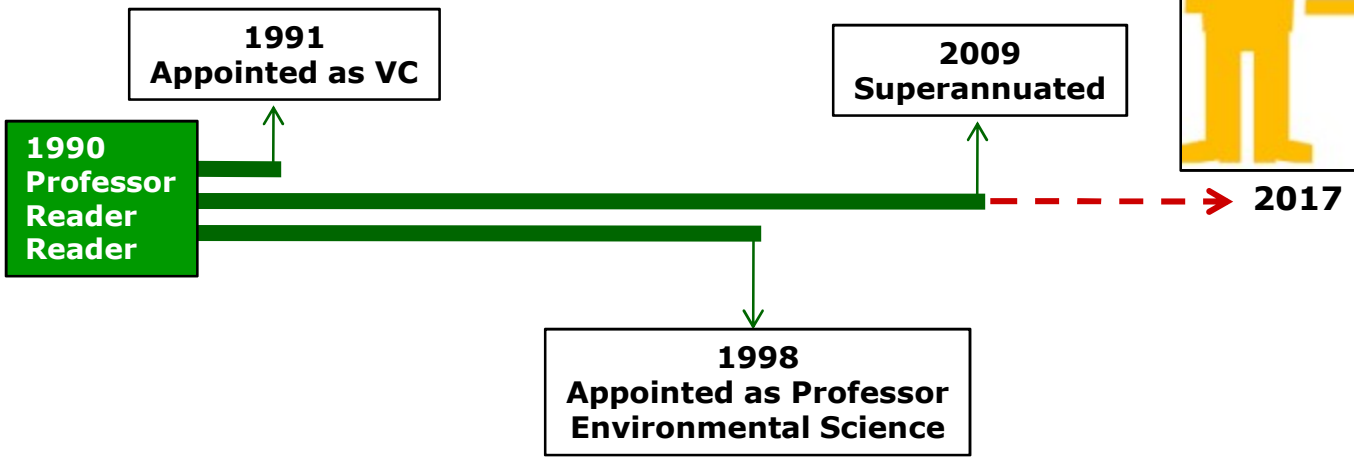
Plants for Life on Planet
Protect and Conserve Plants

Established in 1990



Started with 3 faculty members





S.No.	Name of Faculty	From	To	Purpose of Relieving
1	Prof. TN Bhardwaja	1990	1991	Appointed as VC Kota Open University
2	Prof. SK Mahna	1990	2009	Superannuated
3	Prof. KC Sharma	1990	1998	Appointed as Professor of Env. Science

1 Curricular Aspects

Academic Programmes

Presently

Ph.D.

M.Sc.

M.Sc.

2002

Department Microbiology

Department of Environmental Science

Earlier

Discontinued

1992

PG Diploma Microbiology
PG Diploma Environmental Technology

M.Phil.

1990

Ph.D.

Programme

M.Sc. Botany

- **Intake:** 20
- **Duration:** 2 Years (4 semesters)
- **Courses:** 4 Theory 1 Practical Each Sem
- **Exam:** Semester System

Syllabus

- Syllabus are periodically revised
- As per semester pattern revised in 2015
- Recently Syllabus has been revised in CBCS system
- Based on UGC model syllabi
- Regional Issues are incorporated
- All permanent teachers are members of BoS

Composition of BoS

1. Dean Faculty- Chair person
2. Professor/Head/PG Principal/UG Principal - Convener
3. Internal members –Minimum 2 (Usually minimum 1 internal member is from affiliated college)
4. External members-Minimum 2

Course Structure

I Year

Semester I

1. Cell & Molecular biology
2. Microbiology & Mycology
3. Algae, Bryophytes & Pteridophytes
4. Plant Physiology

SEMESTER II

5. Genetics & Cytogenetics
6. Gymnosperms & Paleobotany
7. Taxonomy of Angiosperms
8. Plant Biochemistry & Growth Physiology

II Year

SEMESTER III

9. Plant Development
10. Environmental Biology
11. Plant biotechnology
12. Advanced Plant Pathology: Principles and Techniques

SEMESTER IV

13. Plant Reproduction
14. Plant Resources, Conservation & Utilization
15. Genetic Engineering of Plants & microbes
16. Advanced Plant Pathology: Plant Diseases

Feedback on Curriculum

- Informal Feedback from Experts taken
- Formal Feedback from students
- Teachers also gives inputs to members of BoS

2 Teaching-Learning and Evaluation

Teaching Methods

Chalk and Talk
PowerPoint Presentations
Seminars
Discussions
Project work
Filed Trips
Quiz

Started

From Students on teachers
On Curriculum

Guest Lectures

Prof. K. C. Sharma, Formar Vice-Chancellor, MDSU, Ajmer
Dr. Pawan K. Dadhich, Central University of Rajasthan
Dr. Anil Mathur, MSJ College, Bharatpur,
Dr. Surendra Singh, Institute of Science and Technology, Ghaziabad
Dr. Dilip K. Sharma, Vardhman Mahaveer Open University, Kota
Dr. Satish Kumar, MBD College of Science and Technology, Agra

Botanical Field Trips

- Herbal Garden, Pushker
- Pachkund,Nag Pahad & Pushkar
- Sambhar Lake

Events Organized:

C M Govil memorial Lecture was organized on Oct. 16, 2019

Eminent persons were:

Prof. U C Lawania, CIMAP, Lucknow
Prof. V P Singh, MJP University, Bareilly
Prof. P C Trivedi, Jai Narayan Vyas University, Jodhpur

3 Infrastructure and Learning Resources

Classrooms 01
Laboratories 04
Culture Room 02
Seminar Room 01
Herbarium
Departmental Library
Store
HOD Chamber
Faculty room
Office
Botanical Garden
Mist House

Laboratories

- ✓Routine instruments for analyses of water, Soil, Plant tissues.
- ✓Tissue culture facility
- ✓Laminar Flow
- ✓Different Microscopes
- ✓Rotary Microtome
- ✓UV spectrophotometer
- ✓Deep Freezer
- ✓Leaf Area Meter
- ✓ Kjeldahl apparatus
- ✓All routine instruments
- ✓Computers with Wi-Fi connectivity
- ✓LCD Projector
- ✓Printers

Supportive Administration

- Freedom of planning and implementation
- HoD is empowered for appointment of Guest faculty
- Sufficient annual budget
- Power of HODs for utilization as per requirement
- Renovation of department done recently

4 Research & Development

- **Journal of Phytological Research (UGC_CARE, WOS) is stationed at Department.**

- **Four scholars are pursuing their Ph.D. Degree in department.**

- **One research project is sanctioned by UGC with collaboration of Central University of Rajasthan**

- **MOU for joint research activities has been signed with NRCS, Ajmer**

5 Innovations and Best Practices

Best Practices

- Weekly Seminars & Quiz
- Plant surveys: Algae to Angiosperms
- Teachers mentoring for competitive examinations
- Campaign for Clean & Green campus
- Terrace Herbal Garden: Plant collection from NGOs & Organizations
- Well developed Botanical and Herbal Garden in 7 Acres
- Feedback on teachers

Campaign for Plastic Free Campus

Survey of Flora: Project work from Algae to Angiosperms

Awareness about Threat to Plants

Invasive Plants

Prosopis chilensis
Eucalyptus sp.
Lantana camara
Parthenium hysterophorus
Jatropha gossipifolia
Argemone mexicana
Acacia tortilis
Acacia senegal
Simmondasia chilensis
Leucena leucocephala

Endangered Plants

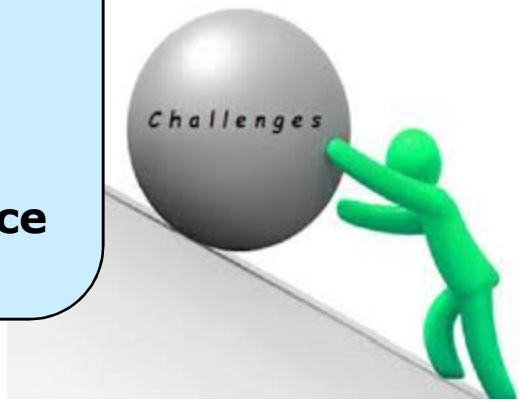
Calligonum polygonoides
Commiphora wightii
Pedalium murex
Tephrosia falciformis
Tribulus rajasthanensis
Boswellia serrata
Ephedra ciliata
Wrightia tinctoria
Colocynthis
Sterculia urens
Tecomella undulata
Bridellia retusa
Cordia crenata
Cordia macleodii
Tamarix dioca
Adensonia digitata

Opportunities

- Can be a research department in the state
- Department can be developed as a center of bio-resources, like of medicinal plants
- Develop linkages and MoUs with research organizations/universities/industries

Challenges

- Appointment of appropriate number of faculty
- Rejuvenation of research
- Collaborations with organizations and industries
- Prepare students for global competence



Future Plans

- Rejuvenate Ph.D. Programme
- Develop a Centre for germplasm conservation
- Establish Biodiversity Park
- Module courses for CBCS – Medicinal Botany
- Collaborations with research organizations
- Research on hydroponics/plant growth in dry-land

Thank you