

PRAGATI MAHAVIDYALAYA

Sawkheda, Tq. Sillod, Dist. Aurangabad.

affiliated to: S.R.D.T. Women's University, Mumbai

College Code: 442 Eram. Center Code: 291

Website: www.pragatisawkheda.co.in

Bmall: pragatiiqac2016@gmail.com, pragatimahavidyalaya442@gmail.com

Contact: 9822021784, 8888611717

Mrs. Kaveri Palkar President Mrs. Archana Mukhekar

Dr. Varsha Phalke

Date-21/03/2022

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Teacher Performance Appraisal Form:

(Tick the Grading level where numbers are given- 1 is the lowest and 5 is the higest)

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Personal Details:	1 1
Name: Dr. Bharathhusan Digambar Pana	Tik
Name: Dr. Bharathhusan Digambar Pana Designation: ASA - Professor	
Department: Botony, Academic Qualifications: ASC, Botany,	
Years of Experience: 2	
Evaluation Period: 2021-22	
Evaluation Period: 2021-22	

1. Teaching Effectiveness:

Ability to communicate subject matter clearly and effectively:

1 2 3 4

Engagement with students in the learning process:

1 2 3 4 5

Use of innovative teaching methodologies and resources:

2 3 4



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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Date: 21/03/2022
Assessment and feedback practice	s	
1 2 3 L	5	
Integration of technology in teach	ing and learning:	
1 2 3	5	
2. Research and Scholarly Activiti	es:	
Publications in UGC journals:	PUBLICATIONS	
Publications in Chapter in book jo	urnals:	
Indian women	and Plant Sciences	
3. Professional Development:		
Participation in workshops, semina	ars, and training programs:	
	types of conferences,	seminars and
workshops for profess	Honal development.	
Attainment of additional qualificat	ions or certifications.	
String for his	ther education	
4. Institutional Engagement:		
Participation in departmental meeti	ings and committees:	• 67 - 13
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Write details and attaché Annexure	Participation in Botan	y Dogget and I
	1 acr atanon 117 DSION	J. Defer wenter
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Esid: 2010 Control Con	Mrs. Archana Mukhekar	Dr. Varsha Phalk Principal
President	Secretary	Date: - 21/03/2022
Contribution to academic planni	ng and policy development:	Desc. 21(00)
Write details and attaché Annexi	ure of it to API form	
I have Resease	eh, innovation and colle	boration in the
Service on institutional boards or	councils:	
5. Student Engagement and Supp	ort:	
Availability and accessibility to s	tudents outside of class hours:	
1 2 3	5	
Support for student academic and	personal development:	
1 2 3	5	
Guidance and counseling for stude	ent career goals:	
1 2 3	4 ,5	
Response to student feedback and	concerns:	
2 3 ,	5	
Promotion of a positive learning en	nvironment:	
2 3 4	1	• 1



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Kaveri Palkar President

Mrs. Archana Mukhekar Secretary

Dr. Varsha Phalke Principal

Date: - 21/03/2022

Contribution to Community and Society:

Engagement in outreach activities and community service:

Write details and attaché Annexure of it to API form

Yes.) involve Various activities in Botany, that optend Knowledge promote sustainability.

C

llaboration with local schools, NGOs, or government agencies:

Write details and attaché Annexure of it to API form

Jes 1 organize interactive workshops on plant biology, environmental conservation.

Initiatives to address social issues or promote education equity:

Write details and attaché Annexure of it to API form

I assemble outreach programs to underseaved Communities, also I Bridge the digital divide to ensure equitable access to advocacy for the profession and educational reforms:

Write details and attaché Annexure of it to API form

the role of plants in ecosystems, agriculture, and medicine.

Representation of the institution in external forums:

Write details and attaché Annexure of it to API form

I participat in conferences and symposia, flosting Public lectures and outreach Events -



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Website: www.pragatisawkheda.co.in Email: pragatiiqac2016@gmail.com, pragatimahavidyalaya442@gmail.com Contact: 9822021784, 8888611717 Dr. Varsha Phalke Mrs. Archana Mukhekar Kaveri Palkar Secretary President 7. Overall Performance Assessment: Rating Scale: 1 Comments: Overall Performance is satisfactory Reviewer's Comments: Write details and attaché Annexure of it to API form Vow well done Teacher's Comments and Self-Assessment: Write details and attaché Annexure of it to API form Try there level best performance. Development Plan: Write details and attaché Annexure of it to API form To foster a deep indesstanding of Plant sciences and their critical role in environmental susdainability. Areas of strength to maintain. Write details and attaché Annexure of it to API form Hege are several potential strengthy- Trehnical Expertise Reseach and Analytical skills.



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Are for improvement and corre	sponding actions.	Date: - 21/03/202		
Write details and attaché Annexus				
DReseasch Skills	-entall in workships are and statistics.	online causes on		
Professional development goals fo	r the next evaluation period.			
Write details and attaché Annexure — En hance Rosea				
Signatures:				
Teacher: B Panolil	Date: 21/03/2022			
Reviewer: Vonsh	Date: 2103 2022 Date: 2103 2022			

"Indian Women and Plant Sciences"



Dr. Bharatbhushan Digambar Pandit

Botany Department Pragati Mahavidyalaya, Sawkheda.

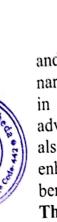
Introduction:

The field of plant sciences encompasses a wide range of disciplines, including botany, horticulture, agriculture, and environmental science, and plays a pivotal role in addressing global challenges such as food security, climate change, and biodiversity conservation. In India, women have played a crucial role in advancing research, education, and practices related to plant sciences, contributing significantly to the sustainable management of natural resources and agricultural innovation.

Despite historical barriers, including limited access to education and research opportunities, Indian women in plant sciences have made remarkable strides. Pioneering figures like Dr. M. S. Swaminathan, often referred to as the "Father of the Green Revolution in India," have been supported by women scientists who have significantly contributed to agricultural research and development. For instance, women researchers have focused on developing high-yielding and drought-resistant crop varieties, which are essential for enhancing food production in the face of climate variability. Women educators and researchers have also been instrumental in promoting sustainable agricultural practices and organic farming. Their efforts in creating awareness about agroecology and biodiversity have been critical in empowering local farmers, particularly women, to adopt sustainable methods that enhance productivity while preserving the environment. women in plant sciences actively participate in community-based initiatives, conservation projects, and environmental advocacy, addressing issues such as deforestation, habitat loss, and the impacts of climate change. By integrating traditional knowledge with scientific research, they contribute to holistic approaches that foster environmental sustainability. In academia, women have emerged as influential educators and mentors, inspiring future generations of plant scientists. Through their dedication

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and leadership, they are breaking stereotypes and reshaping the narrative around women in science. The contributions of women in plant sciences in India are invaluable. Their research, advocacy, and educational efforts not only advance the field but also play a crucial role in fostering sustainable practices and enhancing the resilience of agricultural systems, ultimately benefiting society at large.

The Significance of Plant Sciences in India:

1. Agricultural Importance

India is primarily an agrarian economy, with agriculture contributing significantly to its GDP and employing a substantial portion of the population. Understanding plant biology, genetics, and ecology is essential for improving crop yield, enhancing food security, and promoting sustainable agricultural practices.

2. Biodiversity Conservation

India is home to a rich diversity of plant species, many of which are endemic. Women in plant sciences are pivotal in researching and conserving this biodiversity, contributing to the understanding of ecological balance preservation of indigenous species.

3. Environmental Sustainability

The sustainable management of natural resources is critical in addressing challenges such as climate change, soil degradation, and habitat loss. Women scientists in plant sciences work towards developing sustainable practices that promote ecological balance and environmental health.

Pioneering Women in Plant Sciences:

1. Dr. Kamaljit Bawa

Dr. Kamaljit Bawa is a prominent ecologist and biologist known for her research on biodiversity and conservation. Her work emphasizes the importance of conserving tropical forests and the role of plant diversity in ecosystem functioning. She has been instrumental in promoting sustainable practices in agriculture and forestry.

2. Dr. Suman Ghosh

Dr. Suman Ghosh is a renowned plant scientist who specializes in plant physiology and biochemistry. Her research focuses on understanding plant responses to

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environmental stresses, such as drought and salinity. She has contributed significantly to the development of stressresistant crop varieties.

Dr. Anita Singh

Dr. Anita Singh is recognized for her work in the field of horticulture, particularly in fruit and vegetable breeding. Her contributions have led to the development of high-yielding, disease-resistant varieties of fruits and vegetables, improving food security and nutritional value.

4. Dr. Madhuri Joshi

Dr. Madhuri Joshi has made significant contributions to ethnobotany and the study of medicinal plants. Her research focuses on the traditional uses of plants in Indian medicine, highlighting the importance of preserving indigenous knowledge and promoting sustainable harvesting practices.

Innovations and Contributions in Plant Sciences:

1. Crop Improvement and Biotechnology Indian women in plant sciences are at the forefront of research in crop improvement through biotechnology. Their work involves genetic modification, molecular breeding, and tissue culture techniques that enhance crop yield, nutritional value, and resistance to pests and diseases.

2. Sustainable Agricultural Practices

Women scientists have been pioneers in developing sustainable agricultural practices that reduce reliance on chemical fertilizers and pesticides. Their research on organic permaculture and agroecology, environmentally friendly farming methods that improve soil health and biodiversity.

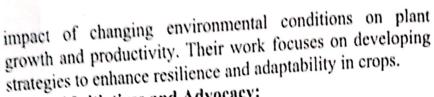
3. Conservation of Indigenous Plants

The conservation of indigenous plant species is critical for maintaining biodiversity and supporting local ecosystems. Women in plant sciences are actively engaged in documenting traditional plant uses, advocating for the conservation of native species, and promoting sustainable harvesting practices.

4. Climate Change Research

As climate change poses significant challenges to agriculture and ecosystems, women researchers are investigating the

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Educational Initiatives and Advocacy:

Promoting Education in Plant Sciences

Women in plant sciences are dedicated to promoting education and awareness about the importance of plant biology and conservation. They engage in outreach programs, workshops, and seminars to inspire young girls and women to pursue careers in science.

2. Mentorship and Leadership

Mentorship plays a vital role in empowering the next generation of women in plant sciences. Established women scientists are actively mentoring students and early-career researchers, providing guidance and support for their professional development.

3. Advocacy for Gender Equity

Women in plant sciences advocate for gender equity in scientific research and education. They work towards creating an inclusive environment that encourages the participation of women in leadership roles and decisionmaking processes within the scientific community.

Challenges Faced by Women in Plant Sciences:

Gender Bias and Stereotypes

Despite significant contributions, women in plant sciences often encounter gender bias and stereotypes that hinder their professional advancement. Addressing these biases is essential for fostering an equitable environment for women in scientific research.

2. Work-Life Balance

Balancing research, teaching, and personal responsibilities poses challenges for many women in academia and industry. Supportive institutional policies, such as flexible work arrangements, help women manage their professional and personal commitments more effectively.

3. Limited Representation in Leadership Roles

Women are often underrepresented in leadership positions within research institutions and organizations. Increasing women's representation in decision-making roles is crucial

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promoting gender equity and ensuring diverse perspectives in plant sciences.

uture Directions in Plant Sciences:

Strengthening Collaborations

Collaborative efforts among women scientists, industry partners, and policymakers drive innovation in plant Interdisciplinary collaborations foster development of holistic solutions that address complex challenges in agriculture and conservation.

Integrating Traditional Knowledge

Future research in plant sciences should prioritize the integration of traditional knowledge with modern scientific practices. Women scientists lead initiatives that bridge the gap between indigenous practices and contemporary research.

3. Expanding Access to Resources

Ensuring that women have access to resources, funding, and training opportunities is essential for promoting their contributions to plant sciences. Institutions should actively support initiatives that empower women in scientific research and education.

4. Fostering Global Partnerships

Global partnerships facilitate the sharing of knowledge, resources, and best practices in plant sciences. Women scientists play a pivotal role in establishing international collaborations that promote sustainable agricultural practices and conservation efforts.

Conclusion:

Indian women have made remarkable contributions to the field of plant sciences, driving research and innovation that address pressing environmental and agricultural challenges. Their work in crop improvement, conservation, and sustainable practices has not only advanced the field but also enhanced food security and biodiversity in India.

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