

**P. V. Vara Prasad**

University Distinguished Professor, and R.O. Kruse Endowed Professor of Agriculture

Director, Feed the Future Sustainable Intensification Innovation Lab (SIIL)

Director, Center for Crops, Climate and Communities (College of Agriculture)

108 Waters Hall, 1603 Old Claflin Place, Kansas State University (KSU), Manhattan, Kansas 66506, USA.

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**I. Education:**

July 1999 PhD (Agriculture): Crop Physiology  
Department of Agriculture, The University of Reading, Reading, UK.

Nov. 1993 MSc (Agriculture): Agronomy: First Class with a Gold Medal  
Andhra Pradesh Agricultural University (APAU), Hyderabad, India.

July 1991 BSc (Agriculture): First Class, APAU, Hyderabad, India.

**II. Employment and Professional Experience:**

Jun. 2024 to present Director, Center for Crops, Climate and Communities

Oct. 2020 to present R.O. Kruse Endowed Professor of Agriculture

July 2016 to present University Distinguished Professor, Crop Ecophysiology

Oct. 2014 to present Director, Feed the Future Innovation Lab for Sustainable Intensification

July 2013 to Jun. 2016 Professor, Crop Ecophysiology

July 2009 to Jun. 2016 Director, Great Plains Sorghum Improvement and Utilization Center

July 2009 to Jun. 2013 Associate Professor, Crop Ecophysiology

Aug. 2005 to Jun. 2009 Assistant Professor, Crop Ecophysiology, Agronomy Department, KSU

**III. Adjunct / Honorary Positions**

Adjunct Professor Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India.

Adjunct Professor SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India.

Adjunct Professor University of the Philippines Los Banos, Philippines.

Adjunct Professor Sher-e-Kashmir Univ. Agric. Sci. & Technology, Jammu & Kashmir, India.

Adjunct Professor Royal University of Agriculture, Phnom Penh, Cambodia.

Adjunct Professor Sri Konda Laxman Telangana State Horticultural University, Hyderabad, India

**IV. Fellowships**

Elected Fellow (2014) American Society of Agronomy (ASA)

Elected Fellow (2015) Crop Science Society of America (CSSA)

Elected Fellow (2016) American Association for the Advancement of Science (AAAS)

Elected Fellow (2023) Indian Society of Plant Physiology

Elected Fellow (2024) National Academy of Agricultural Sciences (India)

**V. Scholarships and Awards:**

Visionary Scientist for African Ag. (2024) ASA, CSSA and SSA – OCP North America, USA

Certificate of Appreciation (2024) Royal University of Agriculture, Cambodia

Lifetime Achievement Award (2024) Bihar Agricultural Univ, & Excellent Vision Foundation, India

K.K. Nanda Memorial Award (2023) Indian Society of Plant Physiology, India

Lifetime Achievement Award (2023) Nutrihub, Indian Institute of Millet Research, India

Highly Cited Researcher Top 1% (2023) Clarivate / Web of Science / Scopus

Distinguished Service Award (2023) Crop Science Society of America

International Crop Science Award (2023)	Crop Science Society of America
Global Scientist (2023)	Agric. & Environ. Technology Develop. Soc., India
Working Group Member (2022 – 2023)	US National Climate Change Roadmap Working Group
Top 1% Highly Cited Researcher (2022)	Clarivate / Web of Science / Scopus
Outstanding Unit Award (2022)	International Programs, KSU
Ahuja Ag. Systems Modeling Award (2022)	Soil Science Society of America (SSSA)
President (2021)	Crop Science Society of America (CSSA)
President (2021 – 2022)	University Distinguished Professor Group, KSU
President (2021 – 2022)	Sigma Xi – Chapter, KSU
International Agronomy Award (2020)	American Society of Agronomy (ASA)
R.O. Kruse Professorship (2020 – 2025)	Endowed Professor of Agriculture, KSU
Commissioner (2020-21)	Commission on Sustainable Agricultural Intensification
FSLI – Fellow Cohort 13 (2017 – 2019)	Food Systems Leadership Institute
Irvin E. Youngberg Award (2017)	Higuchi Research Achievement Award, University of Kansas
Massengale Lectureship (2017)	Crop Science Society of America
Distinguished Faculty Award (2017)	Gamma Sigma Delta, The Honor Society of Agriculture, KSU
Outstanding Scientist Award (2017)	Sigma Xi, The Scientific Research Society, KSU
Outstanding Faculty Award (2016)	Dr. Ron and Rae Iman Award, KSU
IMRF Excellence Award (2016)	International Multidisciplinary Research Foundation
Outstanding Associate Editor (2016)	Crop Science, Crop Science Society of America
Distinguished Graduate Faculty (2015)	Commerce Bank and W.T. Kemper Foundation Award, KSU
Graduate Teaching Award (2015)	Excellence in Teaching, College of Agriculture, KSU
LEAD 21 – Class X (2015)	Leadership for the 21 <sup>st</sup> Century, Land Grant Universities
International Educator Award (2013)	Office of International Programs, KSU
Outstanding Agricultural Scientist (2013)	Association of Agricultural Scientists of Indian Origin (USA)
Outstanding Research Award (2012)	Gamma Sigma Delta, The Honor Society of Agriculture, KSU
President (2010 – 2012)	Association of Agricultural Scientists of Indian Origin, USA
Early Career Award (2009)	Gamma Sigma Delta, The Honor Society of Agriculture, KSU
Young Scientist Award (2006)	Association of Agricultural Scientists of Indian Origin
Arthur Hosier Award (1998)	Travel Award, The University of Reading, United Kingdom
Felix Scholarship (1996 – 1999)	Funded for PhD, University of Reading (6 selected from India)
ICAR – Research Scholarship (1995)	Indian Council of Agricultural Research (ICAR)
NET Certificate (1995)	National Eligibility Test, Certified Agronomist/Teacher, ICAR
PPIC Gold Medal (1994)	Potash and Phosphate Institute of Canada - Gold Medal for Best MSc research at Andhra Pradesh Agricultural University, India
ICRISAT Scholarship (1991 – 1993)	Scholarship for MSc (Ag) from International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India
Government Scholarship (1991)	Government of Andhra Pradesh for MSc (Ag)
ICAR – Merit Scholarship (1987)	Indian Council of Agricultural Research (ICAR) for BSc (Ag)

## VI. Teaching/Graduate Student Mentoring and Training:

**Courses Taught:** AGRON 840, Crop Physiology, 3 credits; AGRON 950, Advanced Crop Ecology, 3 credits; AGRON 600, Problems in Crop Science (variable credits); AGRON 960, Topics in Crop Physiology and Ecology (variable credits). **Average Teaching Evaluations (TEVALS)** for over 11 years = 4.7 out of 5.0

### **Graduate Students and Research Scholars: Mentoring, Advising and Training:**

**Total:** >210 [**>80 Graduate Students (Major Advisor or Committee Member), >50 Research Scholars, and >70 Undergraduate Researchers + 10 Faculty/Staff**]

**VII. Research and Education Grants (Since 2006):**

Secured **>\$ 150 million** (\$ 107 million **as Principal Investigator, PI**) as grants; and **\$ 8 million** as gifts/donations. *Number of Total Grants Funded: >200; as PI: >95 (~85% success)*

**VIII. Professional Contributions/Achievements:*****Specific Research Achievements:***

- Quantified responses to interaction of climate change factors (temperature, water, and carbon dioxide) in various crops (e.g., dry beans, peanut, sorghum, and rice).
- Quantified impact of high temperature stress on several biochemical, physiological, and yield processes in various grain crops. Some of these responses were used in crop simulation models.
- Determined sensitive stages of crop development to high temperature stress in various crops (peanut, sorghum, wheat, millet, and soybean).
- Screened several germplasm collections of wheat, sorghum, millet, soybean, and peanut for high temperature and drought tolerance and identified tolerant lines.
- Improved understanding of mechanisms associated with tolerance or susceptibility to abiotic stress (high temperature or drought) in various crops (wheat, rice, sorghum, pearl millet, finger millet, soybean, dry bean, peanut, and canola).
- Developed high-throughput physiological and biochemical tools to screen genotypes for drought and high temperature tolerance in grain crops under field and controlled environment conditions.
- Research featured in national and international media outlets (newspapers, radio, and television).
- Secured > \$150 million to support research and teaching programs from local, national, regional, and international agencies (e.g., commodity commissions, USDA, and USAID).
- Principal investigator of the largest federal competitive research grant that KSU received (\$50 M).
- Instrumental in securing \$ 8 million worth in-kind donation to establish Harold and Olympia Lonsinger Sustainability Research Farm at KSU. One of the largest donations to College of Agriculture at KSU.
- Highly successful in research grant funding. About 85% of grants submitted were funded.

***Specific Teaching / Training / Education Achievements:***

- Developed and taught two graduate-level courses: Crop Physiology (AGRON 840) and Advanced Crop Ecology (AGRON 950).
- Average student teaching evaluations (TEVAL) were 4.7 out of 5.0 over the last nine years at KSU.
- Obtained perfect 5 out of 5 TEVAL in all categories for teaching AGRON 950 during spring 2014.
- Major Professor for a total of 23 graduate students (9 MS and 14 PhD).
- Committee member for a total of 60 graduate students (32 MS and 28 PhD).
- Trained >220 scholars from 15 countries across the world, who hold prominent positions.
- Mentored students to achieve career goals and achievements. All graduated students are employed in academia, national research organizations, or private industry (based on their preference).
- Several graduate students (12) received awards for their research, oral or poster presentations (at regional, national, and international meetings/conferences/workshops, including the CSSA and ASA).
- Research of graduate students (5) featured in the CSSA Newsletter and other magazines.

***Specific Service and Leadership Achievements:***

- Chair, Plant Working Group of the CAST
- Board of Representative on Council for Agricultural Science and Technology (CAST)
- Vice Chair, Plant Working Group of the CAST
- Served as President Crop Science Society of America

- Served as President of Sigma-Xi-Kansas State University Chapter
- Served as President of the Distinguished Professor Group at K-State
- Served on the International Commission of Sustainable Agricultural Intensification (Co-Chaired 3 different working groups – innovation investment study; investment gap study; and principles and metrics study).
- Served as chair and organized several symposiums at national and international conferences and workshops (e.g., ASA; CSSA; and USAID programs).
- Serving/served on editorial boards of 9 different international journals.
- Served as Director of Great Plains Sorghum Improvement and Utilization Center (2009 – 2016).
- Served at KSU in several Departmental, College and University Committees.
- Served as President of the Association of Agricultural Scientists of Indian Origin.
- Peer-reviewed >500 manuscripts for >75 different international journals.
- Reviewed >100 grant proposals for various national and international funding agencies.
- External evaluator for >10 doctoral dissertations from four different countries.
- Led the concept of technology parks for outreach and established 13 technology parks in six countries.
- Led and chaired the team which developed the “Sustainable Intensification Assessment Framework” which can be used by researchers, practitioners and policy makers to understand trade-off and synergies between five domains of sustainable intensification (productivity, economics, environment, social and human condition).
- Judge at various international conferences for awards to students and researchers.
- Competed LEAD-21 Class X program (Leadership Program for Land Grant Universities).
- Completed FSLI – Cohort 13 program (Food Systems Leadership Institute).

### ***Scholarship in Research, Development and Outreach in an International Context:***

Africa: Led research and education programs in several countries in West Africa (Ghana, Mali, Niger, and Mali) and East Africa (Kenya). These projects were funded through USAID Collaborative Research Support Programs (2008-2014) (now called Feed the Future Innovation Labs). These programs focused on development, testing, and transfer of technologies that improve profitability of smallholder farmers through adoption of improved and sustainable crop, soil, and water management practices. Activities focused on cereal (sorghum, millet, and maize) and legume (cowpea, peanut, and soybean) based cropping systems and use of sustainable agricultural practices (cover crops, crop rotation, tillage, integrated nutrient management, and residue management).

Asia: Conducted active research programs in India funded through USAID (2014-2018) on developing climate resilient wheat genotypes with heat and drought tolerance (collaboration with Washington State University and several partner institutions in India). The goal of this project was to develop and release high temperature tolerant wheat genotypes for Southeast Asia. In addition, three USAID - CGIAR and US Universities linkage grants were obtained to improve climate resiliency of millets, sorghum, and rice.

Global: In 2014, received one of the largest single research grants (\$50 million; 2014-19) from USAID to Kansas State University on Sustainable Intensification (Feed the Future Sustainable Intensification Innovation Lab, SIIL). This grant is focused on research and capacity building activities in Africa (Senegal, Burkina Faso, Tanzania, and Ethiopia) and Asia (Bangladesh and Cambodia) that deal with aspects related to sustainable intensification and food and nutrition security of smallholder farmers.

In 2016, established Center of Excellence for Sustainable Agricultural Intensification and Nutrition (CESAIN) at the Royal University of Agriculture in Cambodia with support from USAID-Cambodia Mission.

In 2016, led the understand and design for “Climate Smart Agriculture and Sustainable Intensification” in Rwanda with support from the USAID Mission.

In 2019, the SIIL was further extended for another five years (2019-2024) with additional support (\$25 million) and expanded activities in Latin America and Caribbean.

In 2020, established innovation Research, Education, Advisory Coordination Hub (iREACH) at CORAF (West and Central African Council for Agricultural Research and Development) in Senegal and supports five countries (Ghana, Burkina Faso, Mali, Niger, and Senegal).

In 2021, received large grant (\$12 million) focused on Haiti Agricultural University Partnership to build human and institutional capacity of six universities in Haiti and to establish Center of Excellence on Mitigation, Adaptation, and Resilience to Climate-Change in Haiti (CEMARCH) with support from USAID-Haiti Mission.

In 2022, led the “Scaling Climate Smart Agricultural Technologies: Assessment and Priority Setting for Guatemala.

In 2024, received grant (\$6 million) for “Guatemala – Scaling and Coordination of Agricultural Technologies” from USAID – Guatemala.

Since 2016, led the establishment of 6 agricultural technology parks (ATPs) in Cambodia; 2 ATPs in Senegal; 2 ATPs in Ghana, and one ATP each in Niger, Burkina Faso, and Mali. These serve as one-stop shop to see innovations ready to be scaled and adopted by farmers. These ATPs also serve as training centers for students, extension personnel, scholars, producers, and policy makers.

## IX. Publications and Impact of Research:

### *Publication Summary:*

Peer Reviewed Journal Articles: **401**, Peer Reviewed Book Chapters: **55**; Presentations: **>250** (Invited: >160; Keynote Talks: 35); Abstracts > 380; Reports >100; Press Articles >25.

### *Impact of Research:*

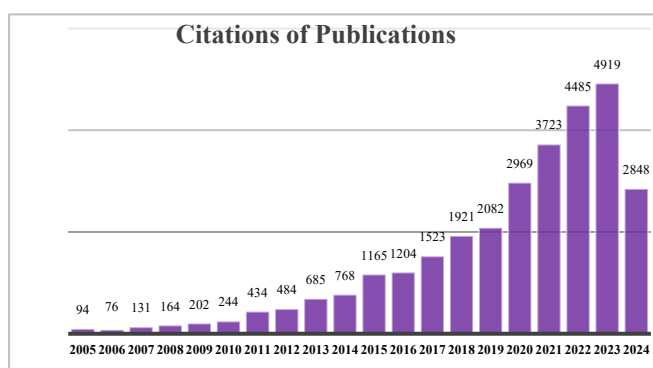
In addition to the direct impact of the research on producers and researchers, research impact is often measured by the number of citations of research articles published by an author.

#### *Google Scholar Statistics:*

Total number of citations: **>30,500**; \*h-index (Hirsch index): **91**; \*\*i-10-index: **>290**

\*h-index is the largest number of papers that a scientist has that have received at least that number of citations. h-index is indicative of a researcher’s productivity; \*\*i-10-index is the number of publications with 10 citations.

Number of publications (journal articles and chapters) and citations from **Jan. 2005 to Jun. 2024**.



**For recent data, follow the website links below:**

Google Scholar: <https://scholar.google.com.au/citations?user=AvfPGxgAAAAJ&hl>  
 Research Gate: [https://www.researchgate.net/profile/P\\_V\\_Vara\\_Prasad](https://www.researchgate.net/profile/P_V_Vara_Prasad)  
 Researcher ID: <http://www.researcherid.com/rid/B-3835-2012>  
 ORCID: <http://orcid.org/0000-0001-6632-3361>