

Dharmendra Saraswat

- PhD 2007, Engineering, The Ohio State University; Dissertation: Geospatial Technology Applications to Strawberry, Grape, and Citrus Production Systems
- MS 1990, Agricultural Engineering, Indian Agricultural Research Institute; Dissertation: Performance Evaluation of Tractor-Trailer System Under Varying Operating Conditions
- B.Tech. 1988, Agricultural Engineering, Allahabad University

Academic Experience:

- Associate Professor. 2015 – Present, Department of Agricultural and Biological Engineering, Purdue University.
- Associate Professor/Extension Engineer – Geospatial. 2012 - 2015. Department of Biological and Agricultural Engineering. University of Arkansas.
- Assistant Professor/Extension Engineer – Geospatial. 2007 - 2012. Department of Biological and Agricultural Engineering. University of Arkansas.
- OPS (Technical), Citrus Research and Education Center, University of Florida. 2006 – 2007.
- Scientist, Central Institute of Agricultural Engineering, Indian Council of Agricultural Research, New Delhi, India. 1993 – 2001.
- Assistant Professor, Chandra Sekhar Azad University of Agriculture and Technology, Kanpur, India. 1991 – 1993.

Certifications:

Professional Organizations: American Society of Agricultural and Biological Engineers; Association of Agricultural, Biological, and Food Engineers of Indian Origin; Indian Society of Agricultural Engineers; American Society for Photogrammetry and Remote Sensing; Gamma Sigma Delta; and Alpha Epsilon.

Honors and Awards (past five years):

- **ASABE Standards Award**, 2018
- **ASABE, Educational Aids Blue Ribbon Award**, American Society of Agricultural and Biological Engineers (ASABE). 2017
- **ASHS 2016 Outstanding App Award**, The American Society for Horticultural Science (ASHS) Extension Division. (Hort Plants) 2016
- **Blue Ribbon Extension Communication Award**, Southern Region- American Society of Horticultural Science (SR-ASHS). (Hort Plants) 2016
- **ANRC NPS Award**, Arkansas Natural Resources Commission (ANRC) and Public Policy Center of University of Arkansas Division of Agriculture. 2015
- **ASABE, Educational Aids Blue Ribbon Award**, American Society of Agricultural and Biological Engineers (ASABE). (FTTCloud) 2015
- **ISAE Fellow**, Indian Society of Agricultural Engineers (ISAE), New Delhi. 2014
- **The John W. White Outstanding Extension State Faculty Award**, University of Arkansas System Division of Agriculture. 2014

Service Activities (past five years):

Internal:

- Member, University Senate, Purdue University (2017-2020)
- Member, Graduate Committee, ABE Department, Purdue University (2015-continue)

External (select services):

- Co-Chair, Development Committee: 2018 ASABE-ISAE Global Water Security Conference.
- Member, Technical Program Committee: 2018 SmartAg Visionary and Planning Session.

- Member, Technical Program Committee: 2017 SmartAg Symposium.
- Co-Facilitator, Food Accessibility, Utilization and Stability session, 2017 SmartAg Symposium.
- Co-Chair, Theme Session-1: Enhancement of Food Availability Through Mechanization and Precision Agriculture, 2016 Engineering and Technology Innovation for Global Food Security Conference, ASABE.
- Panelist, Group-5: Capacity Building for Mitigation of Climate Change by Use of Precision Agriculture in Developing Countries, 2016 Engineering and Technology Innovation for Global Food Security Conference, ASABE.
- Vice-Chair, E-2050/2- International Membership Community Support Committee, ASABE.
- Facilitator, Global Engagement Day, ASABE (2014).

Select Publications (past five years):

- Singh, G. and **D. Saraswat**. 2018. A Sensitivity Analysis of Impacts of Conservation Practices on Water Quality in L'Anguille River Watershed, Arkansas. *Agricultural Water Management, Water*, 10(4): 443 doi:[10.3390/w10040443](https://doi.org/10.3390/w10040443)
- Leiva, J.N., J. Robbins, **D. Saraswat**, Y. She and R. Ehsani. 2017. Evaluating Remotely Sensed Plant Count Accuracy with Differing UAS Altitudes, Differing Canopy Separations and Ground Covers. *Journal of Applied Remote Sensing: CIGR Journal*. 11(3):036003-1 to 036003-15.
- Singh, G. and **D. Saraswat**. 2016. Development and Evaluation of Targeted Land Mapping Approach in SWAT Model for Simulating Water Quality Impacts of Selected Second Generation Biofeedstock. *Environmental Modelling and Software*. 81: 26-39.
- Pai, N., and **D. Saraswat**. 2015. Integrating Land Use Change Influences in Watershed Models. In *GIS Applications in Agriculture, Volume 4: Conservation Planning*, 205-219. T. Muller and G.F. Sassenrath, ed., CRC Press.
- Rahman, M., ⁴B. Blackwell, N., Banerjee, and **D. Saraswat**. 2015. Smartphone based Hierarchical Crowdsourcing for Weed Identification. *Computers and Electronics in Agriculture* 113: 14-23.
- **Saraswat, D.**, J.R. Frankenberger, N. Pai, S. Ale, P. Daggupati, K.R. Douglas-Mankin, and M.A. Youseff. 2015. Hydrology and Water Quality Models: Documentation and Reporting Procedures for Calibration, Validation, and Use. *Trans. ASABE*. 58(6): 1787-1797.

Presentations

- **Saraswat, D.** 2017. Data Management for Purdue Ag Centers, In *2017 NCERA Annual Meeting*, Starkville, MS, May 16.
- **Saraswat, D.** 2017. UAS (a.k.a. drones): Know Before You Fly. In *Randolph County, IN Farmer Coffee Hour*, Winchester, IN, February 2.
- **Saraswat, D.** 2016. It's a Bird, It's a Plane, It's a UAS. In *Back to Class- President's Council Members*, West Lafayette, November 11.
- **Saraswat, D.** 2016. Unmanned Aircraft Systems: Pre-flight Essentials and An Inventory Application. In *Southwest Ag Summit*, Yuma, AZ February 24-25.

Professional Development (most-recent activities)

- **Saraswat, D.** 2017. UAS Regulations and Miscellaneous Topics- 3.0 hrs. long session. In UAS Workshop for Extension Educators, West Lafayette, IN, September 25, **14 attendees**.
- Robbins, J., **D. Saraswat**, and Wayne Woldt. 2016. **Unmanned Aircraft: Are You Ready to be a Pilot and Chart New Directions?** - 3.0 hrs. long. In *National Association of County Agricultural Agents Conference*, Little Rock, AR, July 24-28, **70 attendees**.