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Texas A&M University
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Education

2009 Ph.D. Agricultural & Biological Engineering, Purdue University, West Lafayette, IN
1992 M.S. Agricultural Engineering, G.B. Pant University of Ag. & Tech., Pantnagar, India
1989 B.S. Agricultural Engineering, Andhra Pradesh Ag. University, Hyderabad, India

Professional Experience

9/2016 – Present Associate Professor, Texas A&M Agrilife Research, Vernon, TX
9/2016 – Present Associate Professor, Dept. of Biological & Agricultural Engineering,
Texas A&M University, College Station, TX
12/2010 – 8/2016 Assistant Professor, Texas A&M Agrilife Research, Vernon, TX
12/2010 – 8/2016 Assistant Professor, Dept. of Biological & Agricultural Engineering,
Texas A&M University, College Station, TX
5/2009 – 12/2010 Postdoctoral Research Associate, Purdue University, West Lafayette, IN
6/2005 – 5/2009 Graduate Research Assistant, Purdue University, West Lafayette, IN
9/2001 – 12/2001 Visiting Scientist, Alterra-ILRI (International Institute for Land
Reclamation and Improvement), Wageningen, The Netherlands
8/1993 – 5/2005 Assistant Professor, Department of Agricultural Engineering, A.N.G.
Ranga Agricultural University (ANGRAU), Andhra Pradesh, India
5/1992 – 8/1993 Project Associate, Agriculture & Rural Development Area,
Administrative Staff College of India, Hyderabad, India

Research Interests

Water resources management on crop, pasture and rangelands; land use change and grazing management impacts on hydrology, and soil and water quality; climate change impacts on hydrology and crop production; water quality assessment & management; Irrigation & drainage.

Honors and Awards

2020 Outstanding Associate Editor, ASABE journals
2017 Recognition of Excellence as an Associate Editor, ASABE journals
2014 Research Excellence Award, Biol. & Ag. Engineering, Texas A&M University.
2012 Outstanding Reviewer, Soil & Water Division, ASABE Journals.
2008 Outstanding Ph.D. Student, Ag & Biological Engineering, Purdue University, IN.
2003 Young Scientist Award (Gold medal), A.N.G Ranga Agricultural Univ., India.
1990-1992 United Nations Development Project (UNDP) fellowship (during M.S.).
1985-1989 Andhra Pradesh State Government Merit Scholarship (during B.S.).

Professional and Synergistic Activities

- Fellow, Indian Water Resources Society (IWRS); Indian Association of Hydrologists (IAH).
- Life Member, American Society of Agricultural and Biological Engineers (ASABE).
- Life member, Indian Society of Agricultural Engineers (ISAE); Andhra Agricultural Union.
- Member, American Geophysical Union (AGU); International Association of Hydrological Sciences (IAHS); American Society of Agronomy (ASA); Soil Science Society of America (SSSA).
- Invited Member, Alpha Epsilon Agricultural Engineering Honor Society.
- Associate Editor, Natural Resources and Environmental Systems (NRES) Division, ASABE Journals (Transactions of the ASABE; Applied Engineering in Agriculture), 2013-present.
- Panel Proposal Reviewer, USDA-NIFA Water for Food Production Systems (2018), NSF-INFIEWS (2017), USDA-NIFA Foundational Program (2017).
- Proposal Reviewer, USGS-NIWR 104(g) grant proposals (2014, 2016); USDA-Ogallala Aquifer Program proposals (2015, 2016, 2018); Southern SARE proposals (2018, 2019); Chilean FONDECYT grant proposal (2019); BARD proposal (2019).
- Vice-Chair, ASABE Annual International Meeting Technical Program (2020-2022)
- Chair (2020-2021), NRES-09 Forward Planning Committee, ASABE
- Past-Chair (2020-2021), Chair (2019-2020), Vice-Chair (2018-2019) and Secretary (2017-2018); NRES Community, ASABE.
- Chair (2018-2019) and Vice-Chair (2017-2018); NRES-04 Program Committee, ASABE.
- Chair (2016-2018) & Vice-Chair (2014-2016); NRES-07 Nomenclature Committee, ASABE.
- Chair (2015-2017) and Vice-Chair (2013-2015); NRES-23 Drainage Group, ASABE.
- Past-Chair (2019-2020), Chair (2018-2019) and Chair-Elect (2017-2018); Texas Section ASABE.
- Vice-Chair (Program and Plans), Texas Section ASABE (2016-2017).
- Chair, Awards Committee, Texas Section ASABE (2015-2016).
- Vice-Chair (Continuing Education), Texas Section ASABE (2014-2015).
- Member, ASABE E-2050/5 Global Engagement/Global Conference Committee (2018-2020)
- Member, ASABE Model Calibration and Validation Standards Process Committee; ASABE EP479 Standard Revision Committee.

Major Student & Mentee Recognitions

- Kritika Kothari, Former Ph.D. student, Biological & Agricultural Engineering, TAMU
 - 2020 Texas A&M Distinguished Dissertation Award – Biological and Life Sciences
 - 2019 Graduate Student Research Paper Award, 1st place in Ph.D. category, Association of Agricultural, Biological & Food Engineers of Indian Origin (AABFEIO) of ASABE
 - 2019 Bill and Rita Stout International Graduate Student Achievement Award, Dept. of Biological & Agricultural Engineering, TAMU
- Yong Chen, Former Ph.D. student, Soil and Crop Sciences, TAMU
 - 2016 - Special Achievement Award for Graduate Student Research, TAMU
 - 2016 - 3rd Prize, Poster competition, Southern ASA Meeting

- Naga Raghu Modala, Former Ph.D. student, Biological & Agricultural Engineering, TAMU
 - 2013 People's choice award for poster presentation, Water Daze conference, TAMU

Research Grants (22)

1. **Ale, S.**, Adams, C., Biggers, K., Wall, J., Kimura, E., and Fan, Y. Development and evaluation of a novel sensor- and crop-model based decision support tool for efficient irrigation management. Texas A&M Water Seed Grant Initiative. \$276,474 (2020-2021).
2. Swanson, C., Stoleru, R., Fipps, G., and **Ale, S.** Creation of an AI-powered next generation home irrigation controller. Texas A&M Water Seed Grant Initiative. \$318,284 (2020-2021).
3. **Ale, S.**, DeLaune, P. and Himanshu, S. Evaluation of soil health benefits of cover crops in cotton production systems of the Texas Rolling Plains. Cotton Incorporated. \$20,000 (2020).
4. Gopal Naik, M., **Ale, S.**, Gupta, H., Jaber, F., Lai, J.S., Huang, J.C. Planning and development of climate resilient water sensitive urban designs: A case study of Hyderabad Metropolitan City. Scheme for Promotion of Academic and Research Collaboration (SPARC), A Government of India Initiative, INR 7,700,000 (2019-2021).
5. Morgan, C.L.S., Woodward, R., McIntosh, W.A. and **Ale, S.** Actionable links between soil function, ecosystem services, and stakeholder perceptions to overcome barriers to improved soil management. USDA-NIFA Foundational Program, \$496,000 (2018-2022).
6. Adams, C., Trostle, C., **Ale, S.**, DeLaune, P., Park, S., Hoogenboom, G., Boote, K. Enhancing ecosystem services through integration of guar into wheat cropping systems of the Southern Great Plains. USDA-NIFA Foundational Program, \$445,000 (2018-2022).
7. Gitz, D., Hudson, D., **Ale, S.**, Mauget, S., Lascano, R. and Goebel, T. Assessment of potential yield increases and economic risk avoidance through management of soil hydrologic processes in semi-arid rain fed systems. USDA-ARS Ogallala Aquifer Program, \$110,822 (2018-2022).
8. Wang, T., Feng, H., Hennessy, D.A., **Ale, S.** and Park, J. Saving grassland of the Great Plains: Is management intensive grazing (MIG) a socioeconomically viable option? USDA-NIFA Foundational Program, \$499,985 (2017-2021).
9. Chaubey, I., **Ale, S.**, Fox, G., Drollinger, D., Gitau, M.W., Haman, D., Harmel, R.D., Irmak, S., Nejadhashemi, P., Saraswat, D., Searcy, S., Swamy, A.A., Quansah, J. and Wolfe, M.L. Global Water Security for Agricultural Production and Natural Resources. USDA-NIFA Foundational Program – Agricultural Engineering (Conference proposal). \$50,000 (2018).
10. **Ale, S.**, Bordovsky, J. and Thorp, K. Determining optimum irrigation termination periods for cotton production in the Texas High Plains using the DSSAT Cropping System Model. Cotton Incorporated. \$42,000 (2017-2019).
11. **Ale, S.**, Bordovsky, J.P. and Porter, D. Development and evaluation of efficient irrigation management strategies for grain sorghum production in the Texas High Plains under current and future climate scenarios. USDA-ARS Ogallala Aquifer Program, \$44,220 (2015-2020).
12. Bordovsky, J. P., Wall, J. A., Porter, D., Biggers, K. and **Ale, S.** Development, deployment and demonstration of the Dashboard for Irrigation Efficiency Management (DIEM). Texas A&M Water Seed Grant. \$258,857 (2015-2017).

13. **Ale, S.**, DeLaune, P.B. and Thorp, K. Evaluating the feasibility of cover crops in the Texas Rolling Plains cotton production systems using the DSSAT Cropping System Model. Cotton Incorporated. \$28,000 (2015-2016).
14. Rajan, N., Maas, S., **Ale, S.** and Casey, K. Impacts of biofuel induced land use change on energy, water, carbon and greenhouse gas balances of the Southwestern U.S. Cotton Belt region. USDA-NIFA Sustainable Bioenergy program, \$500,000 (2012-2017).
15. Teague, W.R. and **Ale, S.** Evaluate the impact of using traditional and multi-paddock grazing in southern Tallgrass Prairie on water catchment functions. Dixon Water Foundation, \$117,968 (2014-2017).
16. Rajan N. and **Ale, S.** Testing of cotton crop models for evapotranspiration and crop water use estimation. Cotton Incorporated. \$10,000 (2015).
17. Bordovsky, J. P., Wall, J. A., Porter, D., Biggers, K., Kelly, M. and **Ale, S.** Timely management of limited irrigated crops in Texas using an empirically-based model and innovative information dashboard technology. Texas A&M Water Seed Grant. \$290,575 (2014-2015).
18. **Ale, S.**, Bordovsky, J., Rajan, N. and Thorp, K. Assessing the climate change impacts on cotton production in the Texas High Plains using the DSSAT CROPGRO-Cotton model. Cotton Incorporated. \$14,000 (2014).
19. **Ale, S.**, Rajan, N. and Thorp, K. Assessment of water requirements and development of irrigation management plans for cotton production in the Texas High Plains using the DSSAT CROPGRO-Cotton model. Cotton Incorporated. \$17,000 (2013).
20. Rajan, N., **Ale, S.** DeLaune, P.B., Baughman, T., Park, S., Bean, B., Xue, Q. and Maas, S. Development and evaluation of technologies for improving crop production and formulating decision management tools. Texas AgriLife Research Cropping Systems Initiative, \$300,000 (2011-2013).
21. Rajan, N., **Ale, S.** and DeLaune, P.B. Demonstrating tools for improving on-farm irrigation efficiency. Texas Water Development Board, \$77,208 (2011-2012).
22. Bowling, L.C and **Ale, S.** The influence of subsurface drainage on watershed stream flow and nitrate load, potential for water conservation. USDA NRI, \$ 300,000 (2008-2011).

Teaching Experience

- Member, Graduate Faculty, Texas A&M University, College Station, TX.
- Member, Water Faculty, Water Management and Hydrologic Science program (<http://waterprogram.tamu.edu/>), Texas A&M University, College Station, TX.
- Member, Graduate Faculty, Purdue University, West Lafayette, IN.
- Member, Graduate Faculty (Adjunct), Tarleton State University, Stephenville, TX.

Teaching experience at Texas A&M AgriLife Research/Texas A&M Univ. (since Dec 2010)

- Co-Instructor, Integrated Watershed Management, Graduate level course in the Dept. of Civil Engineering, Osmania University, Hyderabad, India; Spring 2020. Offered as a part of SPARC project funded by the Government of India.

- Gave lectures on ‘Calibration and validation of hydrologic and water quality models’ for ‘Modeling small watersheds (BAEN 673)’ graduate course at Texas A&M University, College Station in Spring 2017 and Spring 2018.
- Gave a webinar lecture on “Decadal trends in Texas groundwater levels and groundwater quality” to graduate students in Environmental Engineering at Texas A&M University, Kingsville as a part of Environmental Engineering seminar series in Spring 2015.
- Served as a faculty advisor/co-advisor for five capstone project teams.

Teaching experience at Purdue University, West Lafayette, USA (May 2009 to Dec 2010)

- Gave a lecture on ‘Measures to reduce nitrate loss from subsurface drainage systems’ for ‘Non-point Source Pollution Engineering (ABE 591)’ graduate course in Spring 2010.
- Taught ‘Agricultural Drainage’ chapter as a part of ‘Environmental Hydrology (AGRY 399)’ undergraduate course in Spring 2010.
- Developed and conducted a lab on ‘Measurement of subsurface drainage and estimation of nitrate losses at Purdue Water Quality Field Station’ for the ‘Environmental Hydrology (AGRY 399)’ course.

Teaching experience at ANG Ranga Agricultural University, India (Aug 1993 to May 2005)

- Taught following courses independently (class sizes varied from 25 to 125 students):
 - Irrigation Engineering (3 semesters)
 - Surveying and Leveling (6 semesters)
 - Soil and Water Conservation Engineering (6 semesters)
 - Wells and Pumps (3 semesters)
 - Hydrology and Watershed Management (1 semester)
 - Fluid Mechanics and Open Channel Hydraulics (1 semester)
 - Agricultural Structures (1 semester)
 - Optimization in Agricultural Engineering (1 semester)
- Served as a faculty advisor for 6 undergraduate research projects (similar to capstone).

Postdoctoral Research Associates in my Research Group (Past and Present):

1. Dr. Sushil Himanshu, Post-Doc (Geospatial Hydrology); September 20, 2018 – present.
2. Dr. Jasdeep Singh, Post-Doc (Ag Water Management); Will start on September 9, 2020
3. Dr. JungJin Kim, Post-Doc (Range Hydrology); September 7, 2017 – July 31, 2020.
4. Dr. Nina Omani, Post-Doc (Geospatial Hydrology), January 17, 2017 – October 4, 2017.
5. Dr. Jong-Yoon Park, Post-Doc (Range Hydrology); June 1, 2014 – October 3, 2016.
6. Dr. Pradip Adhikari, Post-Doc (Geospatial Hydrology); July 2, 2014 – August 16, 2016.
7. Dr. Sriroop Chaudhuri, Post-Doc (Geospatial Hydrology); August 2011 – April 2014.

Service as Chair/Co-Chair on graduate student committees (11):

Current Students (4)

1. Sayantan Samanta; Degree: Ph.D. in Water Management and Hydrologic Sciences, Texas A&M University; Research Area: Modeling soil ecosystem services due to improved soil management. Co-Chairs: C.L.S. Morgan and **S. Ale**. Expected graduation: August 2021.
2. Qiong Su; Degree: Ph.D. in Water Management and Hydrological Science, Texas A&M University; Research Area: Development of integrated modeling system to support regional decision making associated with water, energy, and food. Co-Chairs: Vijay Singh and **S. Ale**. Expected graduation: May 2021.
3. Rene Francis Simbi Mvuyekure; Degree: M.S. in Water Management and Hydrological Science, Texas A&M University; Research Area: TBD. Co-Chairs: **S. Ale** and Vijay Singh. Started in Fall 2020.
4. Montana Caise; M.Eng. in Biological and Agricultural Engineering, Texas A&M University; Co-Chairs: **S. Ale** and S. Calabrese. Started in Fall 2020.

Graduated Students (7)

5. Kritika Kothari; Ph.D. in Biological and Agricultural Engineering, Texas A&M University; Dissertation title: Assessing climate change adaptation strategies for major crops in Texas: A case study in two regions. Co-Chairs: **S. Ale** and Vijay Singh. Graduated in May 2019.
6. Abhinav Kandpal; M.Eng. in Biological and Agricultural Engineering, Texas A&M University; Co-Chairs: **S. Ale** and C.L. Munster. Graduated in May 2018.
7. Victoria Garibay, M.S. in Biological and Agricultural Engineering, Texas A&M University; Thesis: Development and Evaluation of Efficient Irrigation Strategies for Cotton Production in the Southern High Plains under Declining Groundwater Availability. Co-Chairs: **S. Ale** and C.L. Munster. Graduated in December 2017.
8. Ranjit Jha; M.S. in Water Resources Development and Management, Indian Institute of Technology, Roorkee; Thesis: Evaluation of a canal irrigation system performance using remote sensing and GIS. Co-Chairs: Ashish Pandey and **S. Ale**. Graduated in May 2017.
9. Yong Chen, Ph.D. in Soil and Crop Sciences, Texas A&M University; Dissertation: Assessing the impacts of land use change from cotton (*Gossypium Hirsutam* L.) to cellulosic bioenergy crops on watershed hydrology and water quality in the Texas High Plains. Co-Chairs: **S. Ale** and N. Rajan. Graduated in December 2016.
10. Naga Raghuvver Modala; Ph.D. in Biological and Agricultural Engineering, Texas A&M University; Dissertation: Assessing the impacts of climate change on cotton production in the Texas High Plains and Rolling Plains. Co-Chairs: **S. Ale** and C. L. Munster. Graduated in December 2014.
11. Shailee Jain; M.S. in Water Management and Hydrological Science, Texas A&M University; Thesis: Modeling the hydrological impact of *Arundo Donax* on the headwaters of the Nueces River using SWAT. Co-Chairs: C. L. Munster and **S. Ale**. Graduated in August 2014.

Service as a Member on graduate student committees (17):

Current Students (7)

1. Yu Zhang; Degree: Ph.D. in Biological and Agricultural Engineering, Texas A&M University; Research Area: Quantifying uncertainty of Probable Maximum Flood (PMF). Expected graduation: TBD.
2. Fernando Jarrin Perez; Degree: Ph.D. in Biological and Agricultural Engineering, Texas A&M University; Research Area: SWAT modeling of the Zhurucay River Catchment. Expected graduation: TBD.
3. Jeongwoo Han; Degree: Ph.D. in Biological and Agricultural Engineering, Texas A&M University; Research Area: Drought forecasting using entropy theory. Expected graduation: TBD.
4. Shubham Jain; Degree: Ph.D. in Water Management and Hydrological Science, Texas A&M University; Research area: Physically motivated, empirically based approaches for prediction of flow duration curves at ungauged catchments. Expected graduation: TBD.
5. Rajan Shrestha; Degree: Ph.D. in Soil and Crop Sciences, Texas A&M University; Research Area: Guar and cotton phenotyping. Expected graduation: TBD.
6. Creighton Meyers; Degree: Ph.D. in Ecology and Conservation Biology, Texas A&M University; Research area: Prediction of future gradients in coastal temperature and salinity. Expected graduation: TBD.
7. Michelle Wood Ramirez; Degree: M.S. in Water Management and Hydrological Science, Texas A&M University; Research area: Bio-retention modeling. Expected graduation: TBD.

Graduated Students (10)

8. Kyungtae Lee; Degree: Ph.D. in Biological and Agricultural Engineering, Texas A&M University; Research Area: Relationship between extreme precipitation and climatic cycles under climate change in Texas. Graduated in August 2020.
9. Duncan Kikoyo; Degree: Ph.D. in Biological and Agricultural Engineering, Texas A&M University; Dissertation: Inferences from a holistic hydro-economic valuation of water source protection benefits. Graduated in May 2020.
10. Samaneh Saadat; Degree: Ph.D. in Agricultural and Biological Engineering, Purdue University, West Lafayette, IN; Dissertation: Evaluation of hydrological processes and environmental impacts of free and controlled subsurface drainage. Graduated in Dec 2018.
11. Sanjay Kanwal; Degree: M.Eng. in Biological and Agricultural Engineering, Texas A&M University. Graduated in December 2018.
12. Sumit Sharma; Ph.D. in Soil and Crop Sciences, Texas A&M University; Dissertation: Carbon, evapotranspiration and energy balance dynamics of potential bioenergy crops compared to cotton in the Southern Great Plains. Graduated in May 2017.
13. Abhishek Singh; M.S. in Biological and Agricultural Engineering, Texas A&M University; Thesis: Quantifying Uncertainty in Probable Maximum Precipitation. Graduated in December 2016.

14. Benjamin Jacobson; M.W.M. in Water Management and Hydrological Science, Texas A&M University; Presentation: Winery effluent and wastewater irrigation. Graduated in December 2016.
15. Sarah Rutkowski; M.S. in Agricultural and Biological Engineering, Purdue University, West Lafayette, IN; Thesis: Assessing climate change variability impacts on subsurface drainage and streamflow patterns in agricultural watersheds. Graduated in May 2012.
16. Mohan Rao, B.V.; M.S. in Soil and Water Engineering, Acharya N.G. Ranga Agricultural University, Hyderabad, India; Thesis: Performance evaluation of 'DRAINMOD' in a drained area of Krishna Western Delta. Graduated in July 2011.
17. Marisa Bumguardner; M.S. in Water Management and Hydrological Science, Texas A&M University; Thesis: Feedstock logistics of a mobile pyrolysis system and assessment of soil loss due to biomass removal for bioenergy production. Graduated in June 2011.

Publications

([Google Scholar](#) citations: 1235; h-index: 21; i10-index: 32 as of August 29, 2020)

Refereed Journal Articles: **71 (+ 3 in review)**

Invited Book Chapters: **2**

Conference Papers: **111** (31 full-length/proceedings papers and 80 abstracts/posters)

Research/Extension/Technical Bulletins: **6**; Research Reports/Edited Proceedings: **14**

Popular press articles: **18**; Invited Talks/Presentations/Guest Lectures: **18**

Invited Book Chapters (2)

1. **Ale, S.**, P.V. Femeena, S. Mehan, and R. Cibin. 2019. Environmental impacts of bioenergy crop production and benefits of multifunctional bioenergy systems. In: Pires, J.C., and Goncalves, A.L. (Eds.) *Bioenergy with carbon capture and storage: nature and technology can help*. Elsevier Publishing. pp. 195-217. doi.org/10.1016/B978-0-12-816229-3.00010-7
2. Sands, G.R., **S. Ale**, L.E. Christianson, and N. Utt. 2017. Subsurface (tile) agricultural drainage. In: Hazlett, R., Bogucki, P., Huertos, M.L., Nemes, A., and Provenzano, G. (Eds.) *Oxford Research Encyclopedia of Agriculture and the Environment*. Oxford University Press. doi.org/10.1093/acrefore/9780199389414.013.270

Refereed Journal Articles – Under Review (3)

[¹Post-Doc supervisee; ²Graduate Student advisee (Chair/Co-Chair); ³Graduate Student advisee (Committee member)]

1. Chen, Y., G.W. Marek, T.H. Marek, D.O. Porter, **S. Ale**, J.E. Moorhead, D.K. Brauer, and R. Srinivasan. 2020. Modeling the impacts of emerging land use change on irrigation water use and hydrologic cycle in the Texas High Plains, USA. *Water Resources Research*. Under Review.
2. Kikoyo³, D., P. Smith, **S. Ale**, C. Munster, and P. Schwab. 2020. A composite index-based approach for mapping of ecosystem services' hotspots and coldspots for priority setting in integrated watershed management programs. *Journal of Sustainability*. Under Review.

3. Kikoyo³, D., R. Wurbs, P. Smith, and **S. Ale**. 2019. Optional reservoir operating policies for Lake Victoria in East Africa: A framework for balancing transboundary and local water demands. *Water International*. Under Review (Revised and resubmitted).

Refereed Journal Articles – Published (71)

[¹Post-Doc supervisee; ²Graduate Student advisee (Chair/Co-Chair); ³Graduate Student advisee (Committee member)]

1. **Ale, S.**, D. R. Harmel, A.P. Nejadhashemi, K. DeJonge, S. Irmak, I. Chaubey, K.R. Douglas-Mankin. 2020. Global water security: Current research and priorities for action. *Transactions of the ASABE*. 63(1): 49-55. <https://doi.org/10.13031/trans.13839>
2. **Ale, S.**, N. Omani¹, S.K. Himanshu¹, J.P. Bordovsky, K.R. Thorp, and E.M. Barnes. 2020. Determining optimum irrigation termination periods for cotton production in the Texas High Plains. *Transactions of the ASABE Special collection on Global Water Security*. 63(1): 105-115. <https://doi.org/10.13031/trans.13483> [**Invited Paper**]
3. Kothari², K., **S. Ale**, J. Bordovsky, K. Thorp, D. Porter, C. Munster, and G. Hoogenboom. 2020. Potential benefits of genotype-based adaptation strategies for grain sorghum production in the Texas High Plains under climate change. *European Journal of Agronomy*. Vol. 117, 126037. <https://doi.org/10.1016/j.eja.2020.126037>
4. Harmel, R.D., I. Chaubey, **S. Ale**, A.P. Nejadhashemi, S. Irmak, K. DeJonge, S. Evett, E.M. Barnes, M. Catley-Carlson, S. Hunt, and I. Mani. 2020. Perspectives on Global Water Security. *Transactions of the ASABE Special collection on Global Water Security*. 63(1): 69-80. <https://doi.org/10.13031/trans.13524> [**Invited Paper**]
5. Kothari², K., **S. Ale**, J.P. Bordovsky, and C.L. Munster. 2020. Assessing the climate change impacts on grain sorghum yield and irrigation water use under full and deficit irrigation strategies. *Transactions of the ASABE Special collection on Global Water Security*. 63(1): 81-94. <https://doi.org/10.13031/trans.13465>
6. Kikoyo³, D., P. Smith, and **S. Ale**. 2020. Selective cropping as a soil conservation practice: A benefits evaluation. *Transactions of the ASABE*. Accepted.
7. Saadat³, S., J. Frankenberger, L. Bowling, and **S. Ale**. 2020. Surface ponding and runoff generation in a seasonally frozen drained agricultural field. *Journal of Hydrology*. Vol. 588, 124985, <https://doi.org/10.1016/j.jhydrol.2020.124985>
8. Barnes, E.M., T. Campbell, G. Vellidis, W. Porter, J. Payero, B. Leib, R. Sui, D. Fisher, S. Anapalli, P. Colaizzi, J. Bordovsky, D. Porter, **S. Ale**, J. Mahan, S. Taghvaeian, K. Thorp. 2020. 40 years of increasing cotton water use efficiency through technology adoption and why the trend will continue. *Applied Engineering in Agric*. 36(4): 457-478. <https://doi.org/10.13031/aea.13911>
9. Ayankojo, I.T., K.R. Thorp, K.T. Morgan, K. Kothari², and **S. Ale**. 2020. Assessing the impacts of future climate on cotton production in the Arizona low desert. *Transactions of the ASABE*. 63(4): 1087-1098. <https://doi.org/10.13031/trans.13731>
10. DeLaune, P.B., P. Mubvumba, **S. Ale**, and E. Kimura. 2020. Impact of no-till, cover crop, and irrigation timing and capacity on cotton yield. *Agricultural Water Management*. Vol. 232, 106038, <https://doi.org/10.1016/j.agwat.2020.106038>.

11. Bagnall, D.K., W.M. McIntosh, C.L.S. Morgan, R.T. Woodward, M. Cisneros, Black, M., Kiella, E.M., **S. Ale**. 2020. Farmer's insights on soil health indicators and adoption. *Agrosystems, Geosciences & Environment*. 2020; 3:e20066, <https://doi.org/10.1002/agg2.20066>.
12. Mauget, S., G. Marek, P. Adhikari¹, G. Leikar, J. Mahan, P. Payton, and **S. Ale**. 2020. Optimizing dryland crop management to regional climate. Part I: U.S. Southern High Plains cotton production. *Frontiers in Sustainable Food Systems*. Vol. 3, Article 120. doi: 10.3389/fsufs.2019.00120
13. Mauget, S., K. Kothari², G. Leikar, Y. Emendack, Z. Xin, C. Hayes, **S. Ale**, and L. Baumhardt. 2020. Optimizing dryland crop management to regional climate. Part II: U.S. Southern High Plains sorghum production. *Frontiers in Sustainable Food Systems*. Vol. 3, Article 119. <https://doi.org/10.3389/fsufs.2019.00119>
14. Kothari², K., **S. Ale**, A. Attia, N. Rajan, Q. Xue, and C. Munster. 2019. Potential climate change adaptation strategies for winter wheat production in the Texas High Plains. *Agricultural Water Management Special Issue on "Managing the Ogallala"*. Vol. 225, 105764 <https://doi.org/10.1016/j.agwat.2019.105764>
15. Himanshu¹, S.K., **S. Ale**, J.P. Bordovsky, and M. Darapuneni. 2019. Evaluation of crop-growth-stage-based deficit irrigation strategies for cotton production in the Southern High Plains. *Agricultural Water Management Special Issue on "Managing the Ogallala"*. Vol. 225, 105782 <https://doi.org/10.1016/j.agwat.2019.105782>.
16. Garibay², V.M., K. Kothari², **S. Ale**, D.C. Gitz III, G.D. Morgan, and C.L. Munster. 2019. Determining water-use-efficient irrigation strategies for cotton using the DSSAT CSM CROPGRO-Cotton model evaluated with in-season data. *Agricultural Water management Special Issue on "Managing the Ogallala"*. Vol. 223, 105695 <https://doi.org/10.1016/j.agwat.2019.105695>.
17. Kothari², K., **S. Ale**, J. Bordovsky, K. Thorp, D. Porter, and C. Munster. 2019. [Simulation of efficient irrigation management strategies for grain sorghum production over different climate variability classes](#). *Agricultural Systems*. 170: 49-62.
18. Darapuneni, M. K., O.J. Idowu, L.M. Lauriault, S.K. Dodla, K. Pavuluri, **S. Ale**, K. Grover, and S. Angadi. 2019. Tillage and nitrogen rate effects on corn production and residual soil characteristics. *Agronomy Journal*. 111(3): 1-9. [doi:10.2134/agronj.2018.09.0582](https://doi.org/10.2134/agronj.2018.09.0582)
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Conference Papers (Full length/proceedings papers) **(31)**

[¹Post-Doc supervisee; ²Graduate Student advisee (Chair/Co-Chair); ³Graduate Student advisee (Committee member); [§]Presenter]

1. **Ale, S.**, J. Kim¹, W.R. Teague, and T. Wang[§]. 2019. Simulated watershed-scale impacts of grazing management practices on streamflow characteristics and downstream flooding. *America's Grasslands Conference*. 20-22 August 2019. Bismarck, ND.
2. **Ale[§], S.**, S.K. Himanshu¹, N. Omani¹, J.P. Bordovsky, K.R. Thorp, and E.M. Barnes. 2019. Determining ideal irrigation termination dates under deficit irrigation strategies. *Beltwide Cotton Conferences*. 8-10 January 2019. New Orleans, LA.
3. Himanshu¹, S.K., **S. Ale[§]**, J.P. Bordovsky, and E.M. Barnes. 2019. Assessment of deficit irrigation strategies for cotton production in the Texas High Plains. *Beltwide Cotton Conferences*. 8-10 January 2019. New Orleans, LA.
4. DeLaune[§], P., P. Mubvumba, **S. Ale** and E. Kimura. 2018. Effect of irrigation timing and conservation tillage on cotton production. *Beltwide Cotton Conferences*. 3-5 January 2018. San Antonio, TX.
5. **Ale[§], S.**, J. Park¹, J., and W.R. Teague. 2017. Simulated impacts of grazing management on restoration of key ecosystem services. *America's Grasslands Conference*. 14-16 November 2017. Fort Worth, TX. (Invited)
6. Bordovsky[§], J.P., B. Stoker, P. Bilnoski, C. Garcia, D. Porter, **S. Ale**, K. Biggers, and J. Wall. Dashboard for irrigation efficiency management (DIEM). Proceedings of the 2017 Irrigation Association Technical Conference, Orlando, Florida, November 6-10, 2017. Available from the Irrigation Association, Fairfax, Virginia.
7. Adhikari¹, P., **S. Ale[§]**, P.B. DeLaune and K. R. Thorp. 2016. Assessing the feasibility of growing cover crops in cotton production systems of the Texas Rolling Plains. *Beltwide Cotton Conferences*. 5-7 January 2016. New Orleans, LA.
8. Park^{1,§}, J., **S. Ale** and W.R. Teague. 2015. Assessing the impacts of grazing management practices on watershed hydrology and water quality. *ASABE Annual Meeting Paper No. 152188726*. St. Joseph, MI: ASABE.
9. Modala², N.R., **S. Ale[§]**, N. Rajan, K. R. Thorp and C. Munster. 2015. Simulating the impacts of future climate variability and change on cotton production in the Texas Rolling Plains. *Beltwide Cotton Conferences*. 5-7 January 2015. San Antonio, TX.
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11. Movva, R., S.V. Tammineedi, Y.R. Kaluvai and **S. Ale[§]**, 2012. Experiences from subsurface drainage technology pilot areas of Andhra Pradesh. *ASABE Annual Meeting Paper No. 121341043*. St. Joseph, MI: ASABE.

12. Ale[§], S., L. Bowling, M. Youssef, S. Brouder, and J. Frankenberger, 2010. Potential watershed nitrate load reduction with drainage water management under varied implementation options. *9th International Drainage Symposium (17th CIGR World Congress)*, Quebec City, Canada, Paper No. 100137.
13. Ale[§], S., B.S. Naz and L.C. Bowling, 2007. Mapping of tile drains in Hoagland watershed for simulating the effects of drainage water management, *ASABE Annual Meeting Paper* No. 072144. St. Joseph, MI: ASABE.
14. Prasad[§], P.R.K., D. Srinivas, T.V. Satyanarayana, S. R. Chandra, G. S. Rao, B. M. Rao, Ale, S., 2007. Reclamation of saline and waterlogged soils in Mutluru channel command of Krishna western delta, Andhra Pradesh, India. *4th International Conference on Irrigation and Drainage*. Sacramento, USA.
15. Ale[§], S., L. C. Bowling, S. M. Brouder and J.R. Frankenberger, 2006. Simulating the effects of drainage water management using DRAINMOD. *ASABE Annual Meeting Paper* No. 062313. St. Joseph, Mich.: ASABE.
16. Satyanarayana[§], T.V. and A. Srinivasulu, 2005. Successful pipe drainage technology for reclamation of water logged salt affected lands in Krishna Western Delta of AP, India. *International Agricultural Engineering Conference*, AIT, Bangkok, Thailand.
17. Srinivasulu, A., T.V. Satyanarayana[§] and H.V. Hema Kumar, 2003. Subsurface drainage for the control of water logging in a pilot area in Nagarjunasagar right canal command in south India. *9th International Drainage Workshop* Paper No. 006. Utrecht, The Netherlands.
18. Srinivasulu[§], A., M. Ravikumar², T.V. Satyanarayana and J.L.N. Sudha², 2003. Comparison of crop water requirement and actual water applied in Krishna Western Delta in Andhra Pradesh. In: Procs. of '*International Conference on Water and Environment*', Bhopal, India Vol. I (Watershed Hydrology) pp. 75-83.
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 25. Satyanarayana[§], T.V., **A. Srinivasulu** and H.V. Hema Kumar, 2001. Successful drainage pilot in Nagarjunasagar project right canal command in India – A Case Study. In: Procs. of 1st Asian Regional Conference of ICID, Seoul, Korea.
 26. **Srinivasulu, A.**, T.V. Satyanarayana[§] and H.V. Hema Kumar, 2001. Performance evaluation of closed subsurface drainage system in a pilot area in NSP canal command. In: Proc. of 35th Annual Convention of the Indian Society of Agricultural Engineers, Bhubaneswar, India.
 27. Hema Kumar, H.V., T.V. Satyanarayana[§], **A. Srinivasulu** and G. Aravind Reddy, 2001. Drainage investigations for the design of subsurface drainage system at Konanki pilot area in Prakasham district of Andhra Pradesh. In: Proc. of 35th Annual Convention of the Indian Society of Agricultural Engineers, Bhubaneswar, India.
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 31. **Srinivasulu[§], A.**, K. Yella Reddy and D. Appa Rao, 1994. Design and evaluation of an efficient foot valve. In: Proc. of National Seminar on ‘Conservation of Energy in Agricultural Pumping Systems’, Hyderabad, India. pp. B1-B11.

Conference Papers (Abstracts/Posters/Presentations) (80)

[¹Post-Doc supervisee; ²Graduate Student advisee (Chair/Co-Chair); ³Graduate Student advisee (Committee member); [§]Presenter]

1. **Ale[§], S.**, J. Kim¹, J. Park, and W.R. Teague. 2020. Role of adaptive multi-paddock grazing on downstream flood mitigation and climate change adaptation. *ASABE Annual Meeting Paper* No. 2001652. 13-15 July 2020, Virtual Meeting. (**Invited presentation**).

2. Himanshu¹, S.K., Y. Fan, **S. Ale**[§], and J.P. Bordovsky. 2020. Modeling water productivity and net returns of crop-growth-stage-based deficit irrigation strategies for cotton. *ASABE Annual Meeting Paper* No. 2000609. 13-15 July 2020, Virtual Meeting.
3. Kim¹, J., **S. Ale**[§], W.R. Teague, and S. DelGrosso. 2020. Impact of grazing management practices on soil carbon sequestration under contrasting climatic conditions in the U.S. Great Plains. *ASABE Annual Meeting Paper* No. 2000773. 13-15 July 2020, Virtual Meeting.
4. Samanta^{2,§}, S., **S. Ale**, C.L.S. Morgan, D. Bagnall, R. Woodward, W.A. McIntosh, J.A. Howe, and C. Molling. 2020. Modeling the effects of changes in soil management practices on plant available soil water. *ASABE Annual Meeting Paper* No. 2001339. 13-15 July 2020, Virtual Meeting.
5. **Ale**[§], **S.**, S.K. Himannshu¹, S.A. Mauget, D. Hudson, T.S. Goebel, B. Liu, R.L. Baumhardt, J.P. Bordovsky, D.K. Brauer, R.J. Lascano, and D.C. Gitz. 2020. Potential dryland cotton yield increases from management of selected soil physical and chemical properties associated with soil health. *ASABE Annual Meeting Paper* No. 2001058. 13-15 July 2020, Virtual Meeting.
6. Himanshu¹, S.K., S. Samanta^{2,§}, A. Chang, J. Kim, **S. Ale**, J. Bordovsky, J. Jung, and E. Barnes. 2020. Comparative validation of UAV-collected cotton phenological dataset with manual measurements under different irrigation treatments. *ASABE Annual Meeting Paper* No. 2001213. 13-15 July 2020, Virtual Meeting.
7. Himanshu¹, S.K., Y. Fan, **S. Ale**[§], and J.P. Bordovsky. 2020. Simulated crop-growth-stage-based deficit irrigation strategies for increasing water productivity and net returns. *Beltwide Cotton Conferences*. 8-10 January 2020. Austin, TX.
8. Kothari², K., **S. Ale**[§], J.P. Bordovsky, C.L. Munster, and G. Hoogenboom. 2020. Simulating climate-change-adaptive cultivars for sustaining cotton production in the Texas High Plains. *Beltwide Cotton Conferences*. 8-10 January 2020. Austin, TX.
9. Ayankojo[§], I.T., K.R. Thorp, K.T. Morgan, K. Kothari², and **S. Ale**. 2020. Assessing the impact of future climate on cotton production in the Arizona Low Desert. *Beltwide Cotton Conferences*. 8-10 January 2020. Austin, TX.
10. **Ale**[§], **S.**, and S. Chaudhuri¹. Groundwater quality and availability in Texas, USA: A spatio-temporal assessment. *HYDRO-2019 International Conference*. 18-20 December 2019, Hyderabad, India [**Invited keynote presentation**].
11. **Ale**[§], **S.**, S.K. Himanshu¹, N. Omani¹, J. Bordovsky, K. Thorp, and E. Barnes. 2019. A modeling approach to determine ideal irrigation termination periods for cotton. *ASA, CSSA and SSSA International Annual Meetings*, San Antonio, Texas, Nov. 10-13, 2019.
12. Kothari^{2,§}, K., **S. Ale**, A. Attia, N. Rajan, Q. Xue, and C. Munster. 2019. Winter wheat production in the Texas High Plains under changing climate: Potential impacts and adaptations. *ASA, CSSA and SSSA International Annual Meetings*, San Antonio, Texas, Nov. 10-13, 2019.
13. Samanta^{2,§}, S., **S. Ale**, C.L.S. Morgan, D.K. Bagnall, R.T. Woodward, W.A. McIntosh, and J.A. Howe. 2019. Simulated impacts of soil management practices on plant available

- soil water. *ASA, CSSA and SSSA International Annual Meetings*, San Antonio, Texas, Nov. 10-13, 2019.
14. Kim¹, J., **S. Ale**[§], and W.R. Teague. 2019. Simulated impact of grazing management practices on sediment and nutrient losses, and soil carbon sequestration. *ASA, CSSA and SSSA International Annual Meetings*, San Antonio, Texas, Nov. 10-13, 2019.
 15. Morgan[§], C.L.S., D.K. Bagnall, S. Samanta, R.T. Woodward, W.A. McIntosh, **S. Ale**, and J.A. Howe. 2019. Linking soil structure to adoption of soil health promoting practices in vertisols. *ASA, CSSA and SSSA International Annual Meetings*, San Antonio, Texas, Nov. 10-13, 2019. [Invited presentation]
 16. Bagnall, D.K., C.L.S. Morgan, R.T. Woodward, Wm. A. McIntosh, S. Ale, M. Black, S. Samanta. 2019. Investigating Soil Health and Stakeholder Motivations in the Texas Blackland Prairies. Soil Health Institute Annual Meeting.
 17. **Ale**[§], **S.**, R.B. Movva, Y.R. Kaluvai, and V.S. Tammineedi. 2019. Managing irrigation-induced salinity and waterlogging for achieving water and food security – Experiences from Andhra Pradesh, India. *ASABE Annual Meeting Paper* No. 1901948. 7-10 July 2019, Boston, MA. (**Invited presentation**).
 18. **Ale**[§], **S.**, J. Kim¹, and W.R. Teague. 2019. Influences of climate and soil properties on hydrologic function and soil carbon sequestration under different grazing management practices. *ASABE Annual Meeting Paper* No. 1901337. 7-10 July 2019, Boston, MA.
 19. Himanshu^{1,§}, K., **S. Ale**, J.P. Bordovsky, and M.K. Darapuneni. 2019. Evaluation of deficit irrigation scheduling strategies for cotton to cope with declining water availability in the Southern High Plains. *ASABE Annual Meeting Paper* No. 1900798. 7-10 July 2019, Boston, MA.
 20. Himanshu^{1,§}, K., **S. Ale**, N. Omani¹, J.P. Bordovsky, K.R. Thorp, and E.M. Barnes. 2019. Evaluation of irrigation termination effects on cotton yield and water use efficiency under deficit irrigation strategies in the Texas High Plains. *ASABE Annual Meeting Paper* No. 1900799. 7-10 July 2019, Boston, MA.
 21. Kothari², K., **S. Ale**[§], J.P. Bordovsky, C.L. Munster, and G. Hoogenboom. 2019. Potential climate change adaptation strategies for cotton production in the Texas High Plains. *ASABE Annual Meeting Paper* No. 1900648. 7-10 July 2019, Boston, MA.
 22. Kim^{1,§}, J., **S. Ale**, and R. Teague. 2019. Responses of streamflow, water quality, and soil carbon sequestration under alternative grazing management practices in a cold climate region. *US-Korea Conference on Science, Technology and Entrepreneurship*. 14-16 August 2019, Rosemont, IL.
 23. Morgan[§], C.L.S., D.K. Bagnall, R.T. Woodward, and **S. Ale**. 2019. A soil security research framework that develops actionable links between soil managers and stakeholders. *SSSA International Soils Meeting*, San Diego, California, Jan. 6-9, 2019.
 24. **Ale**[§], **S.**, S. Himanshu¹, N. Omani¹, J. Bordovsky, K. Thorp and E. Barnes. 2018. Simulated strategies for efficient use of irrigation water for cotton production in the Texas High Plains. *Global Water Security Conference for Agriculture and Natural Resources*. 3-6 October 2018, Hyderabad, India.

25. Kothari^{2,§}, K., **S. Ale**, J. Bordovsky, K. Thorp, D. Porter, G. Hoogenboom and C. Munster. 2018. Simulation of water-use-efficient irrigation strategies and climate-change-adaptation scenarios for grain sorghum production in the Texas High Plains. *Global Water Security Conference for Agriculture and Natural Resources*. 3-6 October 2018, Hyderabad, India. (Kothari was selected to receive partial travel assistance from this conference grant).
26. Jha², R., A. Pandey[§] and **S. Ale**. 2018. Performance evaluation of canal irrigation system. *Global Water Security Conference for Agriculture and Natural Resources*. 3-6 October 2018, Hyderabad, India.
27. **Ale**[§], **S.**, N. Omani¹, S. Himanshu¹, and P. DeLaune. 2018. Effect of winter wheat cover crop termination date on soil water availability and yield of cotton in the Texas Rolling Plains. *ASABE Annual Meeting Paper* No. 1801053.
28. Kothari^{2,§}, K., **S. Ale**, J.P. Bordovsky, and C.L. Munster. 2018. Assessing the impacts of climate change on seasonal irrigation and water use efficiency of grain sorghum and cotton in the Texas High Plains. *ASABE Annual Meeting Paper* No. 1800681. St. Joseph, MI: ASABE. (Kothari's presentation was selected as an outstanding NRES graduate student oral presentation).
29. Kim¹, J., **S. Ale**, and R. Teague. 2018. Impact of grazing management practices on water catchment functions and soil carbon sequestration. *ASABE Annual Meeting Paper* No. 1800265.
30. Kim¹, J., **S. Ale**, and R. Teague. 2018. Simulated impacts of grazing management practices on hydrologic components, streamflow pattern, and water quality. *US-Korea Conference on Science, Technology and Entrepreneurship*. 1-4 August, Queens, NY.
31. Kothari², K., **S. Ale**[§], J.P. Bordovsky, and C. Munster. 2018. Evaluation of efficient irrigation management strategies for grain sorghum production in the Texas High Plains. *Ogallala Aquifer Program Workshop*. 27-29 March 2018. Lubbock, TX.
32. **Ale**[§], **S.**, N. Omani¹, J.P. Bordovsky, P. Adhikari, and K. R. Thorp. 2018. Water use efficiency and cotton yield as affected by irrigation termination dates. *Beltwide Cotton Conferences*. 3-5 January 2018. San Antonio, TX.
33. Kothari^{2,§}, K., **S. Ale**, J.P. Bordovsky, G. Hoogenboom and C.L. Munster. 2017. Assessment of climate change impacts and evaluation of adaptation strategies for grain sorghum and cotton production in the Texas High Plains. *American Geophysical Union Fall Meeting*. 11-15 December, New Orleans, LA. (Kothari received a travel grant).
34. **Ale**[§], **S.**, P. Adhikari¹, N. Omani¹, P.B. DeLaune, K.R. Thorp and E.M. Barnes. 2017. Simulated effects of winter wheat cover crop on soil water balances, soil quality and yield of subsequent cotton crop. *ASABE Annual Meeting Paper* No. 1701253. St. Joseph, MI: ASABE.
35. Kothari^{2,§}, K., **S. Ale**, J.P. Bordovsky, K.R. Thorp, D.O. Porter and C.L. Munster. 2017. Assessing the impacts of historic and future climate variability on grain sorghum production in the Texas High Plains. *ASABE Annual Meeting Paper* No. 1701403. St. Joseph, MI: ASABE. (Kothari received a travel grant and her presentation was selected as an outstanding NRES graduate student oral presentation)

36. Garibay^{2,§}, V., **S. Ale**, D. Gitz and C.L. Munster. 2017. Evaluation of the DSSAT CSM CROPGRO-Cotton module for the Texas High Plains using in-season data. *ASABE Annual Meeting Paper* No. 1700755. St. Joseph, MI: ASABE. (Garibay received a travel grant)
37. **Ale**[§], **S.**, P. Adhikari¹, P.B. DeLaune, K. R. Thorp and E.M. Barnes. 2017. Determining ideal winter wheat cover crop termination dates in cotton production systems of the Texas Rolling Plains. *Beltwide Cotton Conferences*. 4-6 January 2017. Dallas, TX.
38. Sharma[§], S., N. Rajan, K. Casey, **S. Ale**, R.W. Jessup and S. Maas. 2017. Inter-annual carbon, water and energy exchange of irrigated and dryland cotton in the Texas High Plains. *Beltwide Cotton Conferences*. 4-6 January 2017. Dallas, TX.
39. **Ale**[§], **S.**, Y. Chen² and N. Rajan. 2016. Implications of Biofuel-Induced Land Use Change and Management on Irrigated Agriculture in the Texas High Plains. *American Geophysical Union Fall Meeting*. 14-18 December, San Francisco, CA.
40. **Ale**[§], **S.**, Y. Chen² and N. Rajan. 2016. Assessing the feasibility of growing perennial grasses for bioenergy production in the Texas High Plains under declining groundwater availability for irrigation. *ASABE Annual Meeting Paper* No. 162462375. St. Joseph, MI: ASABE.
41. Park¹, J., **S. Ale**[§] and W.R. Teague. 2016. Assessing the impacts of future climate change on watershed hydrology and water quality under different grazing management practices. *ASABE Annual Meeting Paper* No. 162462572. St. Joseph, MI: ASABE.
42. Chen^{2,§}, Y., **S. Ale**, and N. Rajan. 2016. Modeling the effects of land use change from cotton (*Gossypium hirsutum* L.) to perennial bioenergy grasses on watershed hydrology and water quality under changing climate. ASA, CSSA, and SSSA 2016 Annual Meetings, November 6-9, Phoenix, AZ.
43. Chen^{2,§}, Y., N. Rajan, S. Sharma, and **S. Ale**. 2016. Using eddy covariance data for calibrating hydrology model for assessing land use change implications. ASA, CSSA, and SSSA 2016 Annual Meetings, November 6-9, Phoenix, AZ.
44. **Ale**[§], **S.**, P. H. Gowda, D.J. Mulla, D.N. Moriasi and M.A. Youssef. 2016. Modeling the effects of climate variability, nitrogen fertilizer application rate and drainage system configuration on nitrate-nitrogen losses in tile flow. *International Drainage Symposium*. 6-9 September, Minneapolis, MN.
45. Chen^{2,§}, Y., **S. Ale**, and N. Rajan. 2016. Land use change from cotton to perennial bioenergy grasses in the Texas High Plains: Implications on water and nitrogen balances. *5th Annual Student Water Conference*. 24-25 March 2016. Oklahoma State University, Stillwater, OK. (Chen received \$500 Travel Grant).
46. Adhikari^{1,§}, P., **S. Ale**, J. P. Bordovsky, K. R. Thorp and N.R. Modala². 2016. Assessing the impacts of future climate change on cotton yields and water use in the Texas High Plains. *Ogallala Aquifer Program Workshop*. 9-10 March 2016. Amarillo, TX.
47. Modala², N.R., **S. Ale**[§], and C. Munster. 2016. Spatial variability in projected future climate across the Texas High Plains. *Ogallala Aquifer Program Workshop*. 9-10 March 2016. Amarillo, TX.

48. Chen^{2,§}, Y., **S. Ale**, and N. Rajan. 2016. Assessing the impacts of land use change from cotton to cellulosic bioenergy crops on watershed hydrology and water quality in the Texas High Plains. *Southern Branch of ASA Annual meeting*. 7-9 February, San Antonio, TX (Chen won third prize in graduate student poster competition).
49. **Ale**[§], **S.**, J. Park¹, and W.R. Teague. 2015. Comparison of the performances of APEX and SWAT models in simulating the impacts of alternate grazing management practices on hydrology and water quality. *American Geophysical Union Fall Meeting*. 14-18 December, San Francisco, CA.
50. Chen^{2,§}, Y., **S. Ale**, and N. Rajan. 2015. Assessing the impacts of land use change from cotton to perennial bioenergy grasses on hydrological fluxes and water quality in a semi-arid agricultural watershed using the APEX Model. *American Geophysical Union Fall Meeting*. 14-18 December, San Francisco, CA.
51. Adhikari^{1,§}, P., **S. Ale**, and P. DeLaune. 2015. Effect of tillage and cover crops on soil macroporosity and hydraulic conductivity. Annual Meetings, Soil Science Society of America. November 15-18, Minneapolis, MN.
52. Rajan[§], N., A. Attia, **S. Ale**, and S. Maas. 2015. Comparison of simulated cotton evapotranspiration with eddy covariance measurements. Annual Meetings, American Society of Agronomy. November 15-18, Minneapolis, MN.
53. Chen², Y., **S. Ale**[§], and N. Rajan. 2015. Assessing the influence of climate variability on land use change from cotton to perennial bioenergy grasses: implications on watershed hydrology and water quality. *International SWAT conference*. 14-16 October 2015. Purdue University, West Lafayette, IN.
54. **Ale**[§], **S.**, P. Adhikari¹ and N.R. Modala². 2015. Simulating the effects of irrigation and crop management practices on soil profile nitrate levels and nitrate leaching to groundwater. *ASABE Annual Meeting Paper No. 152188750*. St. Joseph, MI: ASABE.
55. Park^{1,§}, J., **S. Ale**, W.R. Teague and J. Jeong. 2015. Evaluating the landscape scale impacts of using traditional and multi-paddock grazing on runoff, sediment and nutrient losses. *ASABE Annual Meeting Paper No. 152188740*. St. Joseph, MI: ASABE.
56. Daggupati, P., **S. Ale**[§], N. Pai, R. Zeckoski, J. Jeong, P.B. Parajuli, M.A. Youssef, D. Saraswat and K.R. Douglas-Mankin. 2014. Calibration and validation strategies for hydrological and water quality modeling. *Annual Meeting Paper No. 141914028*. St. Joseph, MI: ASABE (**Invited**).
57. Saraswat, D.[§], N. Pai, J.R. Frankenberger, **S. Ale**, P. Daggupati, K.R. Douglas-Mankin and M.A. Youssef. 2014. Documentation and reporting procedures for hydrologic and water quality models. *Annual Meeting Paper No. 141914000*. St. Joseph, MI: ASABE (**Invited**).
58. Modala^{2,§}, N.R. and **S. Ale**. 2014. Texas Plains climate change interactive GIS web application. *ESRI International User Conference*. 20-24 July 2014. San Diego, CA.
59. Moriasi[§], D.N., P.H. Gowda, J.G. Arnold, D.J. Mulla, **S. Ale**, J.L. Steiner and M. D. Tomer. 2014. New SWAT tile drain equations: Modifications, calibration, validation and application. 69th Soil and Water Conservation Society International Annual Conference. 27-30 July 2014. Lombard, IL.

60. Ale[§], S. and S. Chaudhuri¹. 2013. Groundwater resources and associated environmental issues in Texas: A Changing Scenario. *ASABE Annual Meeting Paper* No. 131618351. St. Joseph, MI: ASABE.
61. Modala^{2,§}, N.R., S. Ale, N. Rajan, K. R. Thorp and C. Munster. 2013. Studying the effects of climate change on cotton production in the Texas High Plains using the DSSAT-CROPGRO-Cotton model. *ASABE Annual Meeting Paper* No. 131612145. St. Joseph, MI: ASABE.
62. Chaudhuri^{1,§}, S. and S. Ale. 2013. Regional trends in groundwater levels and quality as affected by irrigational use in the Southern High Plains of Texas. *ASABE Annual Meeting Paper* No. 131597820. St. Joseph, MI: ASABE.
63. Rajan, N.[§], S. J. Maas, S. Ale, and K.D. Casey. 2013. Impacts of biofuel induced land use change on energy, water, carbon and greenhouse gas balances of the Southwest U.S. cotton belt region. The Association for the Advancement of Industrial Crops Annual Meeting, September 13-19, Washington D.C.
64. Chaudhuri^{1,§}, S., S. Ale, P.H. Gowda, and F.H. Jaber. 2012. Spatio-temporal characterization of groundwater resources in north central Texas. *ASABE Annual Meeting Paper* No. 121338211. St. Joseph, MI: ASABE.
65. Modala^{2,§}, N.R., S. Ale, S. Nair, C. Munster and N. Rajan, 2012. Evaluation of irrigation strategies for the Texas Rolling Plains and the High Plains under projected future climate scenarios using DSSAT model. *ASABE Annual Meeting Paper* No. 121338212. St. Joseph, MI: ASABE.
66. Ale[§], S., P.H. Gowda, D.J. Mulla and D. N. Moriasi. 2012. Comparative performance of DRAINMOD and ADAPT models in predicting nitrate-N losses through tile drainage systems in southern Minnesota. *ASABE Annual Meeting Paper* No. 121338210. St. Joseph, MI: ASABE.
67. Bowling[§], L., S. Rutkowski, S. Ale and K. Cherkauer. 2012. Agricultural drainage and hydrologic variability in the US Corn Belt. *International Annual Meetings, American Society of Agronomy*. 21-24 October, Cincinnati, OH.
68. Bowen[§], G. J., C.D. Kennedy, C. Bataille, Z. Liu, S. Ale, J. VanDeVelde, C. R. Roswell, L. C. Bowling. 2012. Chemical tracers illustrate pathways of solute discharge from artificially drained agricultural watersheds. *American Geophysical Union Fall Meeting*, 3-7 December, San Francisco, CA.
69. Ale[§], S., S. Chaudhuri, P.B. DeLaune, N. Rajan and P.H. Gowda. 2011. Evaluation of strategies to improve groundwater quality in the Texas Rolling Plains. *American Geophysical Union (AGU) Fall Meeting*. 5-9 December, San Francisco, CA.
70. Ale[§], S., L.C. Bowling, I. Chaubey and D. Moriasi. 2011. Prediction of nitrate losses from a subsurface drained agricultural watershed in Indiana using SWAT. *ASABE Annual Meeting Paper* No. 1111273. St. Joseph, MI: ASABE.
71. Rajan[§], N., S. Ale and P. B. DeLaune. 2011. On-farm evaluation of irrigation management options for cotton in the Texas Rolling Plains. *International Annual Meetings, Amer. Soc. Agronomy*. October 16 - 19, San Antonio, TX.

72. Mohan Rao², B.V., M. Raghu Babu, **S. Ale**[§], and T.V. Satyanarayana. 2011. Field evaluation of DRAINMOD-S for a salt affected soil in Krishna western delta, India. *ASABE Annual Meeting Paper* No. 1110629. St. Joseph, MI: ASABE.
73. **Ale, S.**, L.C. Bowling[§], and P.R. Owens. 2011. Spatial distribution of nitrate losses from subsurface drainage systems across Indiana. *National Water Conference*. Washington, D.C.
74. **Ale, S.** and L.C. Bowling[§]. 2010. Subsurface drainage contribution to streamflow in subsurface drained agricultural watersheds in Indiana. *American Geophysical Union (AGU) Fall Meeting*, San Francisco, CA.
75. **Ale**[§], **S.** and L.C. Bowling. 2010. Subsurface drainage influence on streamflow characteristics in agricultural watersheds of Indiana. *Indiana Water Resources Association Spring Symposium*. West Lafayette, IN.
76. **Ale, S.** and L.C. Bowling[§]. 2010. Estimating potentially subsurface drained areas in Indiana and their influence on streamflow pattern. *National Water Conference*. Hilton Head, SC.
77. **Ale**[§], **S.**, L. Bowling, I. Chaubey, J. Frankenberger, K. Merriman, and P. Owens. 2009. Drainage water management impact on nitrate load from subsurface drainage systems in the Hoagland watershed in Indiana. *ASABE Annual Meeting Paper* No. 096895. St. Joseph, MI: ASABE.
78. **Ale**[§], **S.**, L.C. Bowling, M.A. Youssef and S.M. Brouder. 2008. Simulating the effects of fertilization and drainage water management on nitrogen loss to tile drains. *ASABE Annual Meeting Paper* No. 084014. St. Joseph, MI: ASABE.
79. Merriman[§], K.R., I. Chaubey, **S. Ale** and L.C. Bowling. 2008. Quantification of nutrient dynamics in agricultural drainage ditches with BMPs in Hoagland ditch watershed in northern Indiana. *ASABE Annual Meeting Paper* No. 083530. St. Joseph, MI: ASABE.
80. Frankenberger[§], J., E. Kladivko, L. Bowling, S. Brouder, J. Lowenberg-DeBoer, R. Adeuya, B. Carter, **S. Ale**, A. Nistor, and N. Utt. 2008. Drainage water management impacts on watershed nitrate load, soil quality, and farm profitability. *National Water Conference*, Sparks, NV.

Research Reports/ Edited Proceedings (14)

1. **Ale, S.**, Bordovsky, J., Thorp, K. and Omani, N. 2020. Determining optimum irrigation termination periods for cotton production in the Texas High Plains using the DSSAT Cropping System Model. Final Project Report submitted to the Cotton Incorporated. January 2020.
2. Rajan, N., Maas, S., **Ale, S.** and Casey, K. 2017. Impacts of biofuel induced land use change on energy, water, carbon and greenhouse gas balances of the Southwestern U.S. Cotton Belt region. Final Project Report submitted to USDA-NIFA. September 2017.
3. Bordovsky, J., Wall, J., Porter, D., Biggers, K. and **S. Ale**. 2017. Development, Deployment, and Demonstration of the Dashboard for Irrigation Efficiency Management (DIEM). Final Project Report submitted to the Texas A&M Water Seed Grant program. September 2017.
4. **Ale, S.**, DeLaune, P.B., Thorp, K. and Adhikari, P. 2016 & 2017. Evaluating the feasibility of cover crops in the Texas Rolling Plains cotton production systems using the

- DSSAT Cropping System Model. Final Project Report submitted to the Cotton Incorporated. January 2016, 2017.
5. Bordovsky, J., Wall, J., Porter, D., Biggers, K. and **S. Ale**. 2015. Timely Management of Limited Irrigation Crops in Texas Using an Empirically-based Model and Innovative Information Dashboard Technology. Final Project Report submitted to the Texas A&M Water Seed Grant program. September 2015.
 6. **Ale, S.**, Bordovsky, J., Rajan, N., Thorp, K., Adhikari, P. and Modala, N.R. 2015. Assessing the climate change impacts on cotton production in the Texas High Plains using the DSSAT CROPGRO-Cotton model. Final Project Report submitted to the Cotton Incorporated. January 2015.
 7. **Ale, S.**, Rajan, N. and Thorp, K. 2014. Assessment of water requirements and development of irrigation management plans for cotton production in the Texas High Plains using the DSSAT CROPGRO-Cotton model. Final Project Report submitted to the Cotton Incorporated. January 2014.
 8. Rajan, N., **S. Ale**, and P. B. DeLaune. 2013. Demonstrating tools for improving on farm irrigation efficiency (TWDB Contract No. 1103581253). Final project report submitted to the Texas Water Development Board. p.91. http://www.twdb.state.tx.us/publications/reports/contracted_reports/doc/1103581253.pdf August 2013.
 9. Rajan, N., **S. Ale**, P. B. DeLaune, Q. Xue, and S. Maas. 2013. Development and evaluation of technologies for improving crop production and formulating decision management tools. Report submitted to the Texas AgriLife Research Cropping Systems Program.
 10. Naz, B.S., **S. Ale**, L.C. Bowling, and C. Johansen, 2009. Questions and Answers: Automated identification of tile drainage from remotely sensed data. Available online: <http://www.gisagmaps.com/about-tile-mapping/>
 11. **Srinivasulu, A.** and T.V. Satyanarayana (Eds.) 2003. Proceedings of the Workshop on Drainage and water management for the control of salinity and water logging in irrigated agricultural lands, Hyderabad, India. p. 116
 12. **Srinivasulu, A.** 2002. Salt and Water Balance Modeling of the Data from Konanki Pilot area using SALTMOD. Report on collaborative research at the International Institute for Land Reclamation and Improvement (ILRI), Wageningen, The Netherlands. p. 23.
 13. Murthy, N.R.K., B.V.S. Prasad and **A. Srinivasulu** (Eds.) 2002. Souvenir of the seminar on 'Globalization–challenges and opportunities to agricultural engineering', Bapatla, India. p. 95
 14. **Srinivasulu, A.** and T.V. Satyanarayana, 2001. Water Logging and soil salinity in Nagarjunasagar project right canal command – A status report. Indo-Dutch Network Project, Bapatla, Andhra Pradesh, India. p. 59

Research/Extension/Technical Bulletins (6)

1. Hanumanthaiah, C.V., T.V. Satyanarayana, **A. Srinivasulu**, G.V. Lakshmi and M. Ratnam, 2003. Socio-economic, gender and cost-benefit aspects of subsurface drainage

- technology. Technical Bulletin No. 12. Indo-Dutch Network Project, Bapatla, India. p. 32
2. Satyanarayana. T.V., G.V. Lakshmi, C.V. Hanumanthaiyah, **A. Srinivasulu** and M. Ratnam, 2003. Feasible subsurface drainage strategies to combat water logging and salinity in irrigated agricultural lands in Andhra Pradesh. Technical Document. Indo-Dutch Network Project, Bapatla, India. p. 32
 3. Satyanarayana. T.V., G.V. Lakshmi, **A. Srinivasulu**, C.V. Hanumanthaiyah, M. Ratnam, and H.V. Hema Kumar (Eds.) 2002. Drainage and water management for salinity control in canal commands – A comprehensive report on research achievements of Bapatla Network Center. Indo-Dutch Network Project, Bapatla, Andhra Pradesh. p. 130
 4. **Srinivasulu, A.**, G.V. Lakshmi, M. Ratnam, T.V. Satyanarayana, C.V. Hanumanthaiyah, Ch. Ramesh Babu and H.V. Hema Kumar, 2002. *Uppu choudu mariyu uraka bhoomula punarudharanaku muruguneeti nirmulana mariyu neeti yajamanya paddatulu* (in Telugu, an Indian language. English translation: Drainage and water management practices for reclamation of saline and sodic soils). Technical Bulletin 9, Indo-Dutch Network Project, Bapatla, India. p. 32
 5. Satyanarayana, T.V., H.V. Hema Kumar, M. Raghu Babu and **A. Srinivasulu** (Eds.) 2000. Design and construction of drainage systems at Konanki and Uppugunduru. Technical Bulletin No.3, Indo-Dutch Network Project, Bapatla, India. p. 30
 6. Tyagi, N.K., **A. Srinivasulu**, Ambrish Kumar and K.C. Tyagi, 1995. Modeling conjunctive use of water resources: hydraulic and economic optimization. Research Bulletin No.6/95, Central Soil Salinity Research Institute, Karnal, India. p. 86

Popular Press Articles (18)

1. Ledbetter, K., and **S. Ale**. 2020. [New app development could aid crop irrigation management](#). AgriLife Today. February 12, 2020.
2. Coulloudon, L., **S. Ale**, S. Himanshu, and J. Bordovsky. 2019. [Study suggests growth-stage-based irrigation strategies for high-yielding cotton](#). AgriLife Today. November 18, 2019.
3. Ledbetter, K., and **S. Ale**. 2019. [Grain sorghum irrigation water-use efficiency dependent on weather conditions](#). AgriLife Today. January 29, 2019.
4. Ledbetter, K., and **S. Ale**. 2017. [Winter wheat feasible cover crop for Rolling Plains cotton](#). AgriLife Today. November 27, 2017.
5. Ledbetter, K., **S. Ale**, and W. R. Teague. 2017. [Runoff reduced, water retention increased by multi-paddock grazing](#). AgriLife Today. March 9, 2017.
6. Ledbetter, K., **S. Ale**, P. Adhikari, and J. Bordovsky. 2015. [High Plains cotton production can survive climate changes](#). AgriLife Today. November 14, 2015.
7. Ledbetter, K. F. Jaber, **S. Ale**, and L. Reagan. 2015. Rainwater Harvesting Workshop. AgriLife Today. May 27, 2015.
8. Ledbetter, K. and **S. Ale**. 2014. [AgriLife Research study identifies contributing factors to groundwater table declines](#). AgriLife Today. July 10, 2014.

9. Ledbetter, K., S. Ale, and S. Chaudhuri. 2014. [Distinct geographical pattern in Texas' Ogallala Aquifer water quality - southern region has growing concern.](#) AgriLife Today. March 20, 2014.
10. Ledbetter, K., S. Ale, and S. Chaudhuri. 2013. [Salinization of groundwater resources in Texas is a growing concern.](#) AgriLife Today. November 15, 2013.
11. Ledbetter, K., S. Ale, and S. Chaudhuri. 2013. [Groundwater challenges emerging around Dallas-Fort Worth metroplex.](#) AgriLife Today. April 9, 2013.
12. Ledbetter, K., S. Ale, and S. Chaudhuri. 2012. [Groundwater nitrate concentrations increasing in Rolling Plains.](#) AgriLife Today. June 12, 2012.
13. Ledbetter, K. and S. Ale. 2010. [Water quality, quantity will be focus for new AgriLife Research scientist.](#) AgriLife Today. December 21, 2010.
14. Satyanarayana, T.V., Subba Rao, G., Srinivasulu, A., Mukunda Rao, B. and Srinivas, D. 2004. "Samarthanga saguneeti viniyogam - avasyakatha " (in Telugu, an Indian language). Annadata Vol. 36, No. 6, pp. 18 -19.
15. Srinivasulu, A., Satyanarayana, T.V., Lakshmi, G.V., Hanumanthaiah, C.V. and Ratnam, M. 2004. "Uppu, Choudu, Uraka Bhoomula Punarudharanaku Muruguneeti Nirmulana Vyavasthalu " (in Telugu, an Indian language) Annadata Vol. 36, No. 4, pp. 4 -5.
16. Srinivasulu, A. and Singh, T.V.K. 1999. "Sprayerlu dustarla vadakamlo suchanalu" (in Telugu, an Indian language). Prajashakthi dated 05.05.1999.
17. Srinivasulu, A., 1998 "Vidyut motorla nirvahanalo melakuvalu" (in Telugu, an Indian language). Annadata, Vol.30, No.8, pp. 48 – 49.
18. Siva Rao, K.S.V.V., Srinivasulu, A., and Chandramouli, G. 1994. "Pumpsetla nirvahanalo melakuvalu" (in Telugu, an Indian language). Annadata (Bonus Book on Motors and Pump sets), Vol. 26, No.5, pp. 3 -8.

Invited Talks/Presentations/Guest Lectures (18)

1. Evaluation of efficient crop and irrigation management strategies for sustaining crop production under changing climate. Invited presentation delivered during a webinar series organized by the National Institute of Plant Health Management (NIPHM), Hyderabad, India on the theme *Water Management for Plant Health* as a part of International Year of Plant Health celebrations. 3-4 August 2020.
2. Role of adaptive multi-paddock grazing on downstream flood mitigation and climate change adaptation. Invited presentation at the *ASABE Annual International (Virtual) Meeting*. 13-15 July 2020 (repeat from the conference papers).
3. Groundwater quality and availability in Texas, USA: A spatio-temporal assessment. Invited keynote presentation at the *HYDRO-2019 International Conference*. 18-20 December 2020, Hyderabad, India (repeat from the conference papers).
4. Managing irrigation-induced salinity and waterlogging for achieving water and food security – Experiences from Andhra Pradesh, India; Sustainable Food-Water-Energy nexus session at the *ASABE Annual International Meeting*. 7-10 July 2019, Boston, MA. (repeat from the conference papers).

5. Impacts of winter wheat cover crop on soil water availability for cotton in the Texas Rolling Plains. Invited presentation; Precision Cotton Researchers Meeting, Beltwide Cotton Conferences, Dallas, TX; January 4, 2017
6. Land use change from cotton to perennial bioenergy grasses in the Texas High Plains: Implications on water and nitrogen balances. Invited presentation; Indian Institute of Technology, Hyderabad, India; June 14, 2016.
7. Sustainable management of water resources on crop, pasture and grazing lands. Invited presentation; College of Agricultural Engineering, Sanga Reddy (Prof. Jayashankar Telangana State Agricultural University), India; June 14, 2016.
8. Impact of grazing management practices on water conservation, water quality and streamflow. Invited presentation; Canadian River Basins Advisory Committee Meeting; Amarillo, TX; April 19, 2016.
9. Spatio-temporal variability in groundwater levels and quality in Texas. Invited Presentation; Gateway Groundwater Conservation District; Quanah, TX; May 5, 2015.
10. Spatio-temporal variability of groundwater levels and quality in Texas. Invited presentation; Texas Section ASABE meeting; Victoria, TX; October 16, 2014.
11. Groundwater quality in the Red River Basin and Rolling Plains in Texas. Invited presentation; Regional Conference of the Red River Valley Association; Wichita Falls, TX; November 21, 2013.
12. Groundwater quality in the Ogallala aquifer region in Texas. Invited presentation; Ogallala Aquifer Program Workshop; Amarillo, TX; March 5, 2013.
13. Groundwater contamination by nitrate in Texas. Invited presentation; Fall seminar series organized jointly by the Dept. of Biological & Agricultural Engineering and Zachry Dept. of Civil Engineering, Texas A&M University; College Station, TX; September 12, 2012.
14. Shallow groundwater quality in the Canadian and Red River basins. Invited presentation; Red River Authority of Texas Basin Advisory Committee meeting; Amarillo, TX; March 20, 2012.
15. Influence of subsurface drainage on water quality and streamflow pattern in Indiana. Invited presentation; Hydraulics seminar series of the School of Civil Engineering, Purdue University; West Lafayette, IN; March 10, 2010.
16. Irrigation water management. Presentation at the training program for Tennessee National Guard Agricultural Development Team before their deployment to Afghanistan; Purdue University; West Lafayette, IN; February 13, 2009.
17. Subsurface drainage for the reclamation of waterlogged saline lands in canal commands of Andhra Pradesh. Invited Presentation; Indo-Dutch Network Project Workshop; Gujarat Agricultural University; Navsari, India; February 3, 2003.
18. Salt and water balance modeling of the data from Konanki pilot area in Nagarjunasagar project right canal command in India. Guest lecture; 40th International Course on Land Drainage (ICLD); Alterra-ILRI; Wageningen, The Netherlands; December 4, 2001.

Other Professional Activities

1. Guest Editor, Global Water Security Conference Special Collection, Transactions of the ASABE, Applied Engineering in Agriculture; 2018-2020.
2. Guest Editor Chair, Special issue on “Climate Change and Coastal Agriculture”, Journal of the Indian Society of Coastal Agricultural Research (ISCAR), India; 2019-2020.
3. Member, Editorial Board, Journal of Research PJTSAU (Professor Jayashankar Telangana State Agricultural University), Hyderabad, India, 2019-present
4. Reviewed > 140 articles for ~35 journals.
5. Obtained Remote Pilot Certificate for operating small Unmanned Aircraft Systems with effect from November 13, 2018.
6. Co-organizer, Workshop on “Climate change and urbanization: Building resilience in the urban water sector” organized at Osmania University, Hyderabad during 16-17 December 2019. Gave two lectures:
 - a. Climate Resilient Water Sensitive Urban Design – Concept and Examples
 - b. Climate Change Data Download and Processing.
7. Member, International Advisory Board, International Symposium on Coastal Agriculture (ISCA) scheduled to be held during 5-8 November 2020 at Kolkata, India.
8. Member, International Advisory Committee, HYDRO-2019 International conference organized by Osmani University during 18-20 December 2019 at Hyderabad, India.
9. Member, Organizing Committee & Co-Chair, Local Arrangements Committee, ASABE Global Water Security Conference, 3-6 October 2018. Hyderabad, India.
10. Member, International Advisory Committee, International conference on “Sustainable Technologies for Intelligent Water Management” organized by the Indian Institute of Technology, Roorkee during 16-19 February 2018 at Roorkee, India.
11. Member, Organizing Committee, 10th International Drainage Symposium, 7-9 September 2016. Minneapolis, MN, USA.
12. Member, Organizing Committee, International Refresher Course on “Drainage and Irrigation for Sustainable Rural Development” jointly organized by Alterra-ILRI, The Netherlands and ANGRAU in Hyderabad, India.
13. Member, Editorial Board, Andhra Agricultural Journal, 2002-2003.
14. Officer-in-charge of Student Activities, College of Agricultural Engineering (ANGRAU), Bapatla, India (January 1994 to July 1995 and December 1998 to December 1999); Agricultural Polytechnic (ANGRAU), Regional Agricultural Research Station, Palem, India (September 1995 to May 1997).
15. Officer-in-charge of Academic Matters, Agricultural Polytechnic (ANGRAU), Regional Agricultural Research Station, Palem, India (July 1997 to November 1998).

Updated on August 29, 2020