

## **CURRICULUM VITAE**

**DR. FARMAN ALI CHANDIO**  
**Fellowship INTI University, Malaysia**  
**Post- Doc (UJS, China), PhD (NJAU, China),**  
**M.E (SAU) and B.E (SAU)**  
**HEC Approved Supervisor**  
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### **PROFESSIONAL EXPERIENCE**

<b>Organization</b>	<b>Sindh Agriculture University</b>
<b>Organization Type</b>	Education & Research
<b>Department</b>	<b>Chairman From 16<sup>th</sup> August, 2023 to date.</b>
<b>Designation</b>	<b>Associate Professor (BPS-20)</b>
<b>Period</b>	From 15 <sup>th</sup> December, 2015 to date.
<b>Designation</b>	<b>Assistant Professor (BPS-19)</b>
<b>Period</b>	From 20 <sup>th</sup> February, 2014 to 14 <sup>th</sup> December, 2015.
<b>Designation</b>	<b>Lecturer (BPS-18)</b>
<b>Period</b>	From 01 <sup>st</sup> July, 2008 to 19 <sup>th</sup> February 2014.
<b>Location</b>	<b>Tandojam, Sindh, Pakistan</b>
<b>Major Responsibilities</b>	To conduct research, development activities and taught undergraduate, Post graduate students level courses.
<b>Organization</b>	<b>Pakistan Council of Research in Water Resources (PCRWR)</b> Ministry of Science & Technology, Government of Pakistan (In the field of Water Resources Management and Development)
<b>Designation</b>	Assistant Director (BPS-17)
<b>Location</b>	<b>Quetta, Balochistan, Pakistan</b>
<b>Period</b>	From 1 <sup>st</sup> December, 2007 to 30 <sup>th</sup> June, 2008.
<b>Organization</b>	<b>Pakistan Agricultural Research Council (PARC)</b> Ministry of Food, Agriculture & Livestock, Government of Pakistan (In the field of Spate Irrigation System in Rod-Kohi Areas of Pakistan)
<b>Designation</b>	Scientific Officer / Assistant Agricultural Engineer (BPS-17)
<b>Location</b>	<b>Dadu, Sindh, Pakistan</b>
<b>Period</b>	From 03 <sup>rd</sup> January, 2007 to 30 <sup>th</sup> November, 2007.
<b>Organization</b>	Mott McDonald Pakistan (Pvt) Ltd. <b>Consultant for National Programme for Improvement of Watercourses (NPIW)</b> (In the field of Civil work)
<b>Organization Type</b>	Consultancy Firm

**Designation** Field Engineer  
**Location** Hyderabad and Mirpurkhas Region (Sindh, Pakistan)  
**Period** From June, 2005 to December, 2006.  
**Publications** 61 Accepted 2

### ACADMEIC QUALIFICATION

**Degree Name**  
**PhD.** Agricultural Mechanization Engineering from Enginnering College, Nanjing Agricultural University, Nanjing , China, in the year of 2013.  
**Master of Engineering** Farm Power & Machinery from Sindh Agriculture University Tando Jam, in the year of 2009( Grade A` Over all 79.30% C.G.P.A 3.67)  
**Bachelor of Engineering** Agriculture from Sindh Agriculture University Tando Jam, in the year of 2004 (1<sup>st</sup> Division Over all 74.85%)

### AWARDS / HONORS

- ❖ Post Doc fellowship from Young Scientist Program, Government of China, Jiangu University, Zhenjiang, PR China, 2017-19.
- ❖ Received PhD Scholarship from CSC, PR China, 2010 to 2014.
- ❖ Excellent student awarded during PhD program on the basis of SCI research publication. 2013.
- ❖ Outstanding Performance during graduate program (Secured 3<sup>rd</sup> Position in B.E. Agri.) Awarded by the Chancellor of Sindh Agriculture University Tandojam. 2004.
- ❖ In recognition of services during 8<sup>th</sup> Convocation of Sindh Agriculture University Tandojam, 17<sup>th</sup> January, 2015.
- ❖ Appreciation of valuable input during 2<sup>nd</sup> International Conference on Agriculture, Food and Animal Sciences held on 25<sup>th</sup>-26<sup>th</sup> February, 2015 at Sindh Agriculture University Tandojam.

### PERSONAL THESIS

- ❖ Interaction of Straw-Soil-Disc Tool under Controlled Conditions. **PhD.**
- ❖ Performance evaluation of selected tillage implements under the saline-sodic soils. **M.E.**
- ❖ Design and Evaluation of Trickle irrigation system. **B.E** Project.

**Computer Skills** Pro- Engineering, EDEM software and MS-Office.

### PERSONAL INFORMATION

**Father's Name** Naseer Muhammad Chandio(Late)  
**CNIC #** 41306-8077784-3

<b>Date of Birth</b>	01-01-1980
<b>Gender</b>	Male
<b>Marital Status</b>	Married
<b>Permanent Address</b>	Bungalow # C-125, Naseem Nagar, Phase-1, Qasimabad, Hyderabad, Sindh, Pakistan
<b>Membership in honorary professional societies</b>	Life time membership from PEC under the membership No: <b>Agri/2416</b>

### **WORKSHOPS / TRAININGS**

- ❖ **2020** Official training on Post Harvest & Food Processing Technology sponsored by The Arab Republic of Egyptian Ministry of Agriculture and Land Reclamation, The Egyptian International Centre for Agriculture, EICA.
- ❖ 2016 Official Seminar on Agricultural Mechanization for Developing countries. Sponsored by the Ministry of Commerce, organized Chinese Academy of Agricultural Mechanization Sciences (CAAMS), PR China from 21<sup>st</sup> July 2016 to 10<sup>th</sup> August, 2016.
- ❖ 2015 Seminar on Textile Industry Management for Pakistan II. Sponsored by the Ministry of Commerce, organized by Fujian Foreign Trade and Economic Cooperation officials Training Centre, PR China from 27<sup>th</sup> October 2015 to 23<sup>rd</sup> November, 2015.
- ❖ Training “Use of GLAM, MAGIS & Crop Portal for Crop Mapping & Monitoring” Organized by SUPARCO in collaboration with FAO AT Sindh Agriculture University, Tandojam (SAUT), 8<sup>th</sup> Dec - 12<sup>th</sup> Dec, 2014.
- ❖ Training Workshop “Efficient Irrigation Management Practices” under the linkage program between Mehran University and Colorado State University sponsored by Higher Education Commission, Islamabad- Pakistan July 10-12, 2007.
- ❖ Training Workshop “Social & Environmental Water Management” under the linkage programme between Government of Balochistan and Asian Development Bank Sponsored by Royal Government of Netherlands, Quetta. February 26-27, 2008.
- ❖ Second Regional Workshop on Sustainable Water Management organized by the Faculty of Agricultural Engineering, Sindh Agriculture University Tandojam, National Centre of Excellence in Analytical Chemistry, University of Sindh, Jamshoro and Mehran University of Engineering & Technology, Jamshoro, Pakistan in collaboration with Exeter

University, UK and sponsored by DelPHE project through British Council, Karachi from August 4-5, 2009.

### **Research Project**

Empowering Food Security: Innovating Hydroponics with IoT-Based AI Controllers for Sustainable Agriculture and Zero Hunger

**Under Review.**

### **HEC, Pakistan**

**Development Project Proposal**

**The total Budget is 5 Million.**

**Pakistan Engineering Council**

**Agricultural Modernization and its Influence on Agriculture Sustainability, (Spinach) the Hydroponics System (NFT).**

**Total Budget RS. 200000/= Approved**

### **ACADEMIC & ADMINISTRATIVE RESPONSIBILITIES**

- ❖ **Member** Board of studies in the Department of Farm Power and Machinery, Faculty of Agricultural Engineering. From 10<sup>th</sup> June 2014 to Date. Vide No: 786/D.R (Admn)/ 730/ Of 2014.
- ❖ **Member of** University Ranking Review Committee, Sindh Agriculture University, Tandojam, from 26<sup>th</sup> August 2014 to Date. Vide No: Gen/PC/400/399/ Of 2014.
- ❖ **Member of committee** to materialize the arrangements for laptops delivery and distribution plans from 28<sup>th</sup> October 2014 to Date. Vide No: Gen/PC/416/ Of 2014.
- ❖ **Secretary of** laptops delivery and distribution Committee, from 4<sup>th</sup> December 2014 to Date. Vide No: P&D (SAU)/2014/ 767.
- ❖ **Member** of Program Team, Department of Farm Power and Machinery, Faculty of Agricultural Engineering. QEC, Self-assessment report under post-graduate program from 13<sup>th</sup> November 2009 to 24<sup>th</sup> April, 2014. Vide No: DQEC. / 103-122/ OF 2008.
- ❖ **Deputy Director Student's** affair from 01st November 2008 to September 2010. Vide No: Estt./ 4279/ of 2008
- ❖ **Member** Teachers Students Organizing Committee (TSOC) from 11<sup>th</sup> November 2008 to 06<sup>th</sup> January, 2010. Vide No: GEN./ 753/ OF 2008.
- ❖ **Member** of Program Team, Department of Farm Power and Machinery, Faculty of Agricultural Engineering. QEC, Self-assessment report under graduate program from 13<sup>th</sup> November

2009 to 03<sup>rd</sup> September 2010. Vide No: DQEC. / 450-66/ OF 2008.

- ❖ **De-facto member** Liasion Committee of Faculty, Faculty of Agricultural Engineering, from 11<sup>th</sup> November 2009 to 03<sup>rd</sup> September 2010.

## RESEARCH WORK PUBLISHED / PUBLICATIONS

- 1) Xiufang Yang, Rajesh Kumar Soothar, Aftab Ahmed Rahu, Yaosheng Wang, Bin Li, Muhammad Uris Mirjat, Shoukat Ali Soomro, Sher Ali Shaikh and **Farman Ali Chandio\***. Integrated Effects of Water Stress and Plastic Film Mulch on Yield and Water Use Efficiency of Grain Maize Crop under Conventional and Alternate Furrow Irrigation Method. *Water*, **2023**, 15, 924. <https://doi.org/10.3390/w15050924>. (SCI. I.F= **3.53** and HEC recognized).
- 2) Inayatullah Katohar<sup>1,†</sup>, Rajesh Kumar Soothar<sup>1,†</sup>, **Farman Ali Chandio**<sup>1,2</sup>, Mashooque Ali Talpur<sup>1</sup>, Shakeel Ahmed Soomro<sup>1</sup>, Ashutus Singha<sup>3</sup>, Li Bin<sup>4,\*</sup> and Muhammad Uris Mirjat<sup>1</sup>. Drought Priming and Subsequent Irrigation Water Regimes Enhanced Grain Yield and Water Productivity of Wheat Crop. *Water* 2023, 15, 3704. <https://doi.org/10.3390/w15203704>. (SCI. I.F= **3.53** and HEC recognized).
- 3) Irfan Ahmed Shaikh, Aimrun Wayayok, Munir Ahmed Mangrio, Ziyad Ali Alhussain, **Farman Ali Chandio**, Zaheer Ahmed Khan, Waseem Asghar Khan, Mogtaba Mohammed, Murtada K. Elbashir, Jamshaid Ul Rahman. Optimizing Approach of Water Allocation to Off-Takes During Reduced Flows. *Water Resources Management*. **2022**. (SCI. I.F= **3.86** and HEC recognized). <https://doi.org/10.1007/s11269-021-03054-4>
- 4) Fiaz Ahmad, Songchao Zhang, Baijing Qiu, Jing Ma, Huang Xin, Wei Qiu, Shibbir Ahmed, Farman Ali Chandio and Aftab Khaliq. Comparison of Water Sensitive Paper and Glass Strip Sampling Approaches to Access Spray Deposit by UAV Sprayers. *Agronomy* 2022, 12. 1302. (SCI. I.F= **3.86** and HEC recognized) <https://doi.org/10.3390/agronomy12061302>.
- 5) **Farman Ali Chandio**, Yaoming Li, Ma Zheng, Fiaz Ahmad, Tabinda Naz Syed, Sher Ali Shaikh, Mazahr Hussian Tunio. Influence of moisture contents and compressive loading speeds on mechanical properties of maize grains at vertical and lateral orientations. *Int J Agric & Biol Eng*, **2021**; 14(4), 41-49. (SCI. I.F= **3.88** and HEC recognized).
- 6) Sher Ali Shaikh, Yaoming Li, Ma Zheng, **Farman Ali Chandio**, Zhenwei Liang, Mazahr Hussian Tunio, Kashif Ali Solangi. Discrete element method (DEM) simulation of single grouser shoe-soil interaction at varied moisture contents. *Computers and Electronics in Agriculture*. 174, 106, 538. **2021** (SCI. I.F= **6.75** and HEC recognized). <https://doi.org/10.1016/j.compag.2021.106538>

- 7) Shaikh, S.A.; Li, Y.; Zheng, M.; **Chandio, F.A.**; Ahmad, F.; Tunio, M.H.; Abbas, I. Effect of Grouser Height on the Tractive Performance of Single Grouser Shoe under Different Soil Moisture Contents in Clay Loam Terrain. *Sustainability*. 13, 1156. **2021 (SCI. I.F= 2.73 and HEC recognized)**.
- 8) Fiaz Ahmad, Muhammad Adeel, Baijing Qui, Jing Ma, Muhammad Shoaib, Amir Shakoor, **Farman Ali Chandio**. Sowing uniformity of bed-type pneumatic maize planter at various seedbed preparation levels and machine travel speeds. *International Journal of Agricultural and Biological Engineering*. 13, 165-171. **2021 (SCI. I.F= 2.03 and HEC recognized)**.
- 9) **Chandio Farman Ali**, Yaoming Li, Lizhang Xu, Zheng Ma, Fiaz Ahmad, and Imran Ali Lakhari. "Predicting 3D forces of disc tool and soil disturbance area using fuzzy logic model under sensor based soil-bin." *International Journal of Agricultural and Biological Engineering* 13, 4: 77-84. **2020 (SCI. I.F= 2.03 and HEC recognized)**.
- 10) Ali, Shahbaz, Shouhong Zhang, and **Farman Ali Chandio**. "Impacts of rainfall change on stormwater control and water saving performance of rainwater harvesting systems." *Journal of Environmental Management* 280: 111850. **2021 (SCI. I.F= 8.91 and HEC recognized)**.
- 11) **Chandio Farman Ali**, Yaoming Li, Lizhang Xu, Zheng Ma, Fiaz Ahmad, and Imran Ali Lakhari. "Predicting 3D forces of disc tool and soil disturbance area using fuzzy logic model under sensor based soil-bin." *International Journal of Agricultural and Biological Engineering* 13, 4: 77-84. **2020 (SCI. I.F= 2.03 and HEC recognized)**.
- 12) Ahmad, Fiaz, Baijing Qiu, Qishuo Ding, Weimin Ding, Zahid Mehmood Khan, Muhammad Shoaib, **Farman Ali Chandio**, Abdur Rahim, and Abdul Khaliq. "Discrete element method simulation of disc type furrow openers in paddy soil." *International Journal of Agricultural and Biological Engineering* 13,4: 103-110. **2020 (SCI. I.F= 2.03 and HEC recognized)**.
- 13) Ma, Zheng, Min Han, Yaoming Li, Shuncheng Yu, and **Farman Ali Chandio**. "Comparing kernel damage of different threshing components using high-speed cameras." *International Journal of Agricultural and Biological Engineering* 13, 6: 215-219. **2020 (SCI. I.F= 2.03 and HEC recognized)**.
- 14) Zheng Ma, Min Han, Yaoming Li, Hong Yan, Gao, En Lu, **Farman Ali Chandio**, Kechao Ma. Motion of cereal particles on variable amplitude sieve as determined by high speed image analysis. *Computers and Electronics in Agriculture*. 174, 105465. **2020 (SCI. I.F= 6.75 and HEC recognized)**.
- 15) Sher Ali Shaikh, Li Yaoming, **Farman Ali Chandio**, Mazhar H. Tunio, Fiaz Ahmad, Irsad Ali Mari, Kashif Ali Solangi. Effect of Wheat Residue Incorporation with Tillage Management on Physico-Chemical Properties of Soil and Sustainability of Maize

Production. Fresenius Environmental Bulletin. 29 (11): 4921-4929. **2020 (SCI. I.F= 0.553 and HEC recognized).**

- 16) Ahmad, F., Qiu, B., Dong, X., Ma, J., Huang, X., Ahmed, S., **Ali Chandio, F.** Effect of operational parameters of UAV sprayer on spray deposition pattern in target and off-target zones during outer field weed control application. *Computers and Electronics in Agriculture*. 172, 105350, 2020. **2020 (SCI. I.F= 6.75 and HEC recognized).** <https://doi.org/10.1016/j.compag>.
- 17) Mazhar H. Tunio, Jianmin Gao, Sher A. Shaikh, Imran A. Lakhari, Waqar A. Qureshi, Kashif A. Solangi, and **Farman A. Chandio**. Potato production in aeroponics: An emerging food growing system in sustainable agriculture for food security. *Chilean Journal of Agricultural Research* 80(1); 118-132. **2020 (SCI. I.F= 0.991 and HEC recognized).**
- 18) Fiaz Ahmad, Muhammad Tahir Jamil, Alamgir Akhtar Khan, Zahid Mehmood-Khan, Baijing Qiu, Jing Ma and **Farman Ali Chandio**. Field Performance Evaluation and Finite Element Simulation of Cotton Stalk Puller-Shredder: A Sustainable Mechanical Solution to Control Pink Bollworm (*Pectinophora Gossypiella*). *Sustainability*; 12, 3407; **2020 (SCI. I.F= 2.765 and HEC recognized).** doi:10.3390/su120834072.
- 19) Du, Xiaorong, Bin Li, Kunjie Chen, Chao Zhao, Lijun Xu, Zidong Yang, Qian Sun, Farman Ali Chandio, and Guiru Wu. "Rice straw addition and biological inoculation promote the maturation of aerobic compost of rice straw biogas residue." *Biomass Conversion and Biorefinery*, 1-12. **2020 (SCI. I.F= 2.62 and HEC recognized).**
- 20) Tunio M H, Gao J M, Talpur M A, Lakhari I A, **Chandio F A**, Shaikh S A. Effects of different irrigation frequencies and incorporation of rice straw on yield and water productivity of wheat crop. *Int J Agric & Biol Eng*, 13(1): 138–145. **2020 (SCI. I.F= 2.03 and HEC recognized).**
- 21) Lakhari, I.A., Gao, J.M., Tabinda, T.N., **Chandio, F.A.**, Tunio, M.H., **Ahmad, F.**, Solangi, K.A., 2020. Overview of the aeroponic agriculture – An emerging technology for global food security. *International Journal of Agricultural and Biological Engineering*. 13, 1-10. **2020 (SCI. I.F= 2.03 and HEC recognized).** DOI: 10.25165/j.ijabe.20201301.5156.
- 22) Umer Farooq, Dian Chen, Lu, Salim Ahmed, Muhammad Ramzan, Jae Dong Chung, **Farman Ali Chandio**. Computational Analysis for Mixed Convective Flows of Viscous Fluids with Nanoparticles. *ASME J. Therm. Sci. Eng. Appl.*, 11(2), p. 021013. **2019 (SCI. I.F= 0.993 and HEC recognized).**
- 23) Fang Huimin, Ji Changying, **Farman Ali Chandio**, Guo Jun, Zhang Qingyi, Chudhry Arslan. Analysis of Soil Dynamic Behavior during Rotary Tillage Based on Distinct Element Method. *Transaction of the Chinese society for Agricultural Machinery*. 47(3). 2016. **(EI and HEC recognized).**

- 24) Yaoming Li, **Farman Ali Chandio**, Zheng Ma, Imran Ali Lakhari, Abdul Razaque Sahito, Fiaz Ahmad, Irshad Ali Mari, Umer Farooq. Mechanical strength of wheat grain varieties influenced by moisture content and loading rate. *Int J Agric & Biol Eng*, 11(4): 52–57. 2018. (**SCI. I.F= 1.27 and HEC recognized**).
- 25) Yaoming Li, **Farman Ali Chandio**, Zheng Ma, Muhammad Zamanc , Bin Li, Tabinda Naz Syeda. Post harvesting technology: effects of moisture content and loading speed on shearing failure of paddy grains. *International Agricultural Engineering Journal*. 27, 342-349 2018. (**EI and HEC recognized**).
- 26) **Farman Ali Chandio, Li Yaoming**, Sher Ali Shaikh, Ma Zheng, Punhoon Khan Korai, Irshad Ali Mari, Imran Ali Lakhari, Muhammad Suleman. Effect of straw incorporation by tillage implements combination on physico-chemical properties of soil and maize productivity in field condition. *Fresenius Environmental Bulletin*. 27 (11): 7527-75352018. 2018. (**SCI. I.F= 0.69 and HEC recognized**).
- 27) Dianchen lu, Muhammad Suleman, Ji Huan He, Umer Farooq, Samad Noeiaghdam and **Farman Ali Chandio**. Elzaki projected differential transform method for fractional **order system of linear and** nonlinear fractional partial differential equation. *Fractals*, 2018. (**SCI. I.F= 4.53 and HEC recognized**).
- 28) Imran Ali Lakhari, Gao Jianmin , Tabinda Naz Syed, **Farman Ali Chandio** , Noman Ali Buttar and Waqar Ahmed Qureshi. Monitoring and Control Systems in Agriculture Using Intelligent Sensor Techniques: A Review of the Aeroponic System. *Journal of Sensors*. P: 1-18; 2018. <https://doi.org/10.1155/2018/8672769>. (**SCI. I.F= 2.05 and HEC recognized**).
- 29) Imran Ali Lakhari, Jianmin Gao, Tabinda Naz Syed, **Farman Ali Chandio** & Noman Ali Buttar. Modern plant cultivation technologies in agriculture under controlled environment: a review on aeroponics, *Journal of Plant Interactions*, 13:1, 338-352, 2018. DOI: 10.1080/17429145.2018.1472308. (**SCI. I.F= 1.65 and HEC recognized**).
- 30) Punhoon Khan Korai<sup>1</sup>, Tanveer Ali Sial, Qaiser Hussain, Ghulam Murtaza Jamro, Farhana Kumbhar, Farman Ali Chandio. **2018**. Washed biochar enhances soil quality, carbon fractions and the performance of ammonium and nitrates in soil. **Fresenius Environmental Bulletin**. 27(12): 8205-8212 2018. (**SCI. I.F= 0.69 and HEC recognized**).
- 31) ZAMAN M., YUAN S., LIU J., USMAN M., AHMADI., **CHANDIO F.A.**, SAIFULLAH M., LIAQAT M.U., ADNAN M. Quantifying the Effect of Climate Change on Precipitation and Temperature Patterns by Using Variant of Non-Parametric Techniques. *Fresenius Environ Bull*. 26, 7419, 2017. (**SCI. I.F= 0.49 and HEC recognized**).
- 32) F Huimin, Z Qingyi, **FA Chandio**, G Jun, A Sattar, Chaudhry Arslan , Changying Ji<sup>a</sup>.



- Effect of straw length and rotavator kinematic parameter on soil and straw movement by a rotary blade. *Engineering in Agriculture, Environment and Food*. 2016. <http://www.sciencedirect.com/science/article/pii/S1881836616300015>. (**SCI. I.F=1.12 and HEC recognized**).
- 33) Nisar Ahmed Soomro, Muhammad Siddique Depar, Ali Sher Chandio, Behari Lal Meghwar and **Farman Ali Chandio**. Impact of soil and foliar application of potassium on growth, yield of sugarcane and sugar recovery. *Science International*. 27(5), 4309-4315. 2015. (**ISI and HEC recognized**).
- 34) Chaudhry, A. Sattar, Ji Changying, **F.A. Chandio** and A. Nasir. Effect of temperature and total solids concentration on hydrogen production from rice waste. *Pak. J. Agri., Agril. Engg., Vet. Sci.*, 2015, 31 (2): 289-297, 2015. (**HEC recognized**).
- 35) F Ahmad, D Weimin, D Qishuo, Z Mingxing, **FA Chandio**, C Arslan. Fuzzy logic model to predict wheat straw mechanical properties under varying moisture content and loading rate *Pak. J. Agri. Sci* 52 (4), 961-970, 2015. (**SCI. I.F= 1.24 and HEC recognized**).
- 36) I.A. Mari, C. Ji, N. Laghari, **F.A. Chandio**, A. Chaudhry and M. Hassan. Impact of tillage operation on soil physical, mechanical and rheological properties of paddy soil” *Bulgarian Journal of agricultural Science*. 21 (5), 940-946, 2015. (**SCI. I.F= 0.17 and HEC recognized**).
- 37) Mari, Irshad Ali, Ji, Changying, Naimtullah Leghari, **Chandio, Farman Ali, Chuadry Arslan, Asma Sattar and Fang Huimin**. 2015. Analyses of 3-dimensional draught and soil deformation forces caused by mouldboard plough in clay loam soil. *Global Advance Research Journal of Agricultural Science*. 4(6), 259-269, 2015. (**International**).
- 38) Aneela Hameem Memon, Abdul Ghani Soomro, Raza Muhammad Memon, Salahuddin Junejo, **Farman Ali Chandio** and Ashifa Soomro. Salt-tolerance in different varieties of upland cotton *gossypium hirsutum*. *Science International*. 27(5), 4295-4301. 2015. (**ISI and HEC recognized**).
- 39) Ali Sher Chandio, Muhammad Siddique Depar, Behari Lal Meghwar, Muhammad Waseem Kalroo, **Farman Ali Chandio** and Attaullah Khan Pathan. Assessment of nursery raising techniques of various jatropha varieties. *Science International*. 27(4), 3353-3358, 2015. (**ISI and HEC recognized**).
- 40) Irshad Ali Mari, Changying Ji, **Farman Ali Chandio**, Chuadry Arslan, Asma Sattar and Fiaz Ahmad. 2015. Spatial distribution of soil forces on moldboard plough and draft requirement operated in silty clay paddy field soil. *Journal of Terramechanics*. Vol. (60), 1-9. 2015. <http://www.sciencedirect.com/science/journal/0022489>. (**SCI. I.F= 1.245 and HEC recognized**).
- 41) Behari Lal Meghwar, **Farman Ali Chandio**, Muhammad Siddique Daper, Ali Sher

- Chandio, and Muhammad Waseem Kalroo. 2015. Groundwater Quality and Subsequent Effect on Soils In Taluka Tando Adam District Sanghar (Sindh). Science International. 27(3), 2317-2326, 2015. **(ISI and HEC recognized)**.
- 42) Ashifa Soomro, Muhammad Saffar Mirjat, Mazhar Tunio, **Farman Ali Chandio**, A.A. Tagar, Abdul Ghani Soomro and Muneer Ahmed Mangrio. 2015. Effect of Drip And Furrow Irrigation Methods On Water Saving, Yield And Yield Components Of Sunflower Crop. Science International. 27(3), 2235-2242, 2015. **(ISI and HEC recognized)**.
- 43) Abdul Razaque Sahito, Rasool Bux Mahar, **Farman Ali Chandio**. Anaerobic Digestion of Buffalo Dung: Simulation of Process Kinetics. Mehran University Research Journal of Engineering & Technology, 34(1), 2015. **(HEC recognized)**.
- 44) Irshad Ali Mari, **Farman Ali Chandio**, Ji Changying, Chaudhry Arslan, Asma satta, Ahmed Ali Tagar and Fang Huimin. 2014. Performance evaluation of disc tool forces acting on straw incorporation soil. Pak. J. Agri. Sci., 51(3), 1-6; 2014 ISSN (Print) 0552-9034, ISSN (Online) 2076-0906. 2014. **(SCI. I.F= 1.24 and HEC recognized)**.
- 45) Fiaz Ahmed, Ding Weimin. Ding Qishuo, **Farman Ali Chandio**, Irshad Ali Mari, Zhu Mingxing. Fuzzy to predict wheat straw tensile strength influenced by moisture content and loading rate. International Agricultural Engineering Journal, 23(2), 52-61, 2014. <http://www.iaej.cn/EN/abstract/abstract253.shtml>. **(E.I and HEC recognized)**.
- 46) Fang Huimin, Ji Changying, Zhang Qingyi, **Farman Ali Chandio**. Research on mechanical properties of wheat straw at home and abroad. Journal of Chinese Agricultural Mechanization. 35(6) 304-308, 2014. DOI: 10.13733/j.jcam.issn.2095-5553.2014.06.074. **(EI and HEC recognized)**.
- 47) Barkatullah Qureshi, Mubina Pathan, Muhammad Ali Pasha, **Farman Ali Chandio**, Ayaz Keerio, Abdul Razaque Chhachhar. Use of Information and Communication Technology tools among fishermen in Malaysia. Journal of American Science 2014; 10(09). **(ISI and HEC recognized)**. <http://www.jofamericanscience.org>
- 48) Barkatullah Qureshi, Mubina Pathan, **Farman Ali Chandio**, Ayaz Keerio, Riaz Ali Buriro and Abdul Razaque Chhachhar. Adoption of Information Communication Technology tools Among Fishermen. Journal of American Science; 10(7), 2015. **(ISI and HEC recognized)**.
- 49) Mari, C. Ji, A. A. Tagar, **F. A. Chandio** and M.Hanif. Effect of soil forces on the surface of moldboard plow under different working conditions”. Bulgarian Journal of agricultural Science. 20 (2) 277-28, 2014. **(SCI. I.F= 0.17 and HEC recognized)**.
- 50) Mahmood Laghari, Naimtullah Laghari, Ali Raza Shah and **Farman Ali Chandio**. Calibration and Performance of Tractor Mounted Rotary Fertilizer Spreader.

International Journal of Advanced Research, 2 (4), 839-846, 2014.

- 51) A.A. Tagar, Ji Changying, Ding Qishuo, Jan Adamowski, **F.A. Chandio**, I.A. Mari. Soil failure patterns and draft forces as influenced by consistency limits: an evaluation of the remolded soil cutting test. *Soil and Tillage Research*. 137, 58–66. 2014. (**SCI. I.F= 2.38 and HEC recognized**).
- 52) **Farman Ali Chandio**, Ji Changying, Ahmed Ali Tagar, Irshad Ali Mari, Chaudhry Arslan, Do Minh Coung. Effect of loading rate on mechanical characteristics of wheat and rice Straw. *Bulgarian Journal of Agricultural Science*, 19 (6) 2013, 1452-1458. Agricultural Academy. (**SCI. I.F= 0.17**).
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## RESEARCH WORK SUPERVISED

1. Impact of Moisture Content and compressive loading speed on Shearing Strength of different varieties of corn Seeds. **Supervisor. Completed.**
2. Development and experimental analysis of the aeroponics module for coriander crop. **Supervisor. Completed.**
3. Development and evaluation of Hydroponic system (DFT) for coriander production **Supervisor. Completed.**
4. Agricultural Modernization and its Influence on Agriculture Sustainability, (Spinach) the Hydroponics System (NFT). **Supervisor. Completed.**
5. Design & performance monitoring of seed rate with multiple infrared sensors based technology for precision planting. **Supervisor. Completed.**
6. Effect of Different Tillage Implements on Soil Physical Properties, Growth and Yield of Sunflower Crop. **Co-Supervisor. Completed.**

7. Performance Assess The Solar-Cum-Gas Fired Drier (Solar Drier) And Open Sun Drying For Reducing Moisture Level Of Red Chillies. **Supervisor. Completed.**
8. Comparative performance evaluation of conventional and solar tunnel for drying hot chillies. **Supervisor. Completed.**
9. Development and Field Assessment of a Seed Measuring Unit by LDR and Infrared Sensors to be Used in Seed Drill. **Supervisor. Completed.**
10. Performance and Modification of Okra Grain Planter / Drill Using LDR and Infrared Sensors. **Supervisor. Completed.**
11. Effect of different sizes of raised bed and irrigation intervals on the growth and yield of maize crop. **Supervisor. Co-Completed.**
12. Influence of tillage implements on soil physical properties under different working depths. **Supervisor. Completed.**
13. Effect of straw incorporation by different tillage implements combinations on growth and yield of maize crop. **Supervisor. Completed.**
14. Effect of loading rates and moisture contents on rupture force of paddy grains. **Supervisor. Completed.**
15. Effect of chisel and disc plough on the physical properties of soil. **Supervisor. Completed.**

#### **PARTICIPATION IN INTERNATIONAL/NATIONAL CONFERENCES (ABSTRACTS)**

1. Farman Ali Chandio, Li Yaoming, Ma Zheng, Fiaz Ahmad, Irshad Ali Mari, Tabinda Naz Syed & Imran Ali Lakhari. Rupture Force Of Maize Grain Varieties At Vertical And Lateral Orientations As Influenced By Loading Speed And Moisture Contents . 1<sup>st</sup> International conference on agricultural Engineering and Technologies 5-6 November, 2019. Pp 44.
2. **Farman Ali Chandio**, Ji Changying, Fang Huimin, Irshad Ali Mari, Ahmed Ali Tagar, Sher Ali Shaikh & Mazhar Hussain Tunio. Straw-Soil-Tillage Tool Interaction: A Case Study For 3-D Forces Of Disc Tillage Tool. 1<sup>st</sup> International conference on agricultural Engineering and Technologies 5-6 November, 2019. Pp 45.
3. Fang Huimin, Niu Mengmeng, Kang Jianming, **Farman Ali Chandio**, Jian Shichun & Zhang Ninging. Discrete Element Analysis of Cone Penetration Process In Cylinder

Tube. 1<sup>st</sup> International conference on agricultural Engineering and Technologies 5-6 November, 2019. Pp 43.

4. Fiaz Ahmad, Qui Baijing, Ma Jing, Huang Xin & **Farman Ali Chandio**. Comparison Of Sampling Approaches On Spray Deposit In Target And Off-Target Zones Using Unmanned Aerial Vehicle (Uav) Sprayers. 1<sup>st</sup> International conference on agricultural Engineering and Technologies 5-6 November, 2019. Pp 57.
5. Mari, I.A., Changying Ji, **F. Chandio**, C. Arslan & B. Qureshi. 2015. Real Time Measurement of Draught and Soil deformation Forces by Sensors in Semi Mechanical Soil Bin. (Abstract). 2nd international conference on agriculture food and animal sciences 25-26 February, 2015. Pp 39.
6. **Chandio, F.A**, Ji Changying, A.R. Sahito, I.A. Mari & M. Pathan. 2015. Effect of disc tool depths and speeds on soil and wheat straw movement under the controlled conditions. (Abstract) 2nd international conference on agriculture food and animal sciences 25-26 February 2015. Pp 40.
7. Arslan, C., A. Sattar, Ji Changying1, **F. Chandio**, I.A. Mari, A. Nasir. 2015. Effect of temperature on hydrogen production from waste rice (Abstract) 2nd international conference on agriculture food and animal sciences 25-26 February, 2015. Pp 42.
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