

Curriculum Vitae



1. PERSONAL INFORMATION:

Name: Dr. Mansoor Khan Khattak
(Higher Education Approved Supervisor)

Address: Department of Agricultural Mechanization,
Faculty of Crop Production Sciences,
The University of Agriculture, Peshawar,
Khyber Pakhtunkhwa, Pakistan

Date of Birth: 12-01-1963
Nationality: Pakistani
Domicile: District Karak

2. EDUCATION RECORD:

S.No	Degree	Year	Division	Specialization	Institute
1	Post Doctoral	2007	-	Farm Machinery	Auburn, USA
2	Ph.D	2005	-	Farm Power & Mach.	SAU, Tandojam
3	M.Sc (Hons)	1987	First	Agric. Mechanization	AUP
4	B.Sc (Hons)	1985	First	Agric. Mechanization	AUP
5	F.Sc	1981	2 nd	Agriculture	FA, UoP
6	SSC	1979	First	Science	BISE Peshawar

3. EMPLOYMENT RECORD:

S.No	Designation	BS	Department	From	To
1	Professor	21	Deptt. of Agric. Mechanization, The Univ. of Agric.Peshawar, Khyber Pakhtunkhwa, Pakistan	2009	To date
2	Assist. Prof.	19	-do-	2007	2008
3	Assist. Prof.	18	-do-	2000	2007
4	Lecturer	17	-do-	1988	2000

4. EXPERIENCE, ACADEMICS AND SCHOLARY RECOGNITIONS:

- ❖ Total Teaching Experience = 31 yrs
- ❖ Professional Technical Field Experience in TIPAN Project = 5 years
- ❖ Post – Doc Experience = 11 yrs
- ❖ Administrative Experience as Chairman of the department = 8 yrs
- ❖ Research papers published in Impact Factor Journals = 11 Nos
- ❖ Research papers published in HEC recognized national and International Journals = 40 Nos
- ❖ Books Published = 2 Nos
- ❖ Research Project Completed = 2 Nos
- ❖ Research Project undergoing = 2 Nos
- ❖ Research Project submitted = 5 Nos
- ❖ Weather stations Construction Project in KPK in 1991 = 18 Nos
- ❖ Conferences arranged in International & National Level = 2 Nos
- ❖ Conderence, Seminars and Workshop attended = 18 Nos

5. OUTSTANDING AND SIGNIFICANT RESEARCH CONTRIBUTION:

- i. Developed small scale flat plate solar collector with an efficiency of 57% for drying of fruits and vegetables.
- ii. Developed small scale parabolic trough solar collector with an efficiency of 59% for drying of fruits and vegetables.
- iii. Developed parabolic trough small scale solar distillation unit for distillation of water for laboratory research work.

6. AWARD OF NEW RESEARCH PROJECTS

- i. Development of efficient digester for production of purified biogas from biomass” of Rs. 2.565 million under National Research Program for Universities through HEC August, 2015
- ii. Evaluation and comparison of Flat Plate and Parabolic Trough solar collectors for water distillation, water heating and drying of fruits and vegetables” of Rs. 2.295 million under National Research Program for Universities through HEC August, 2015

7. PROJECT COMPLETED:

- i. Construction & Installation of meteorological stations Under NWFP Agricultural University Research System (about 18 research stations) in 1991. Cost of the project was **approx.Rs. 10 million.**
- ii. Research project completed on “Effect of Deep Tillage Practices on Root Growth and Yield of Wheat - Corn Rotation” funded by UGC at AUP Farm Malakandher and CCRI Pirsabak. These studies are for a duration of two years (October 1999 to October 2001) and the cost of the project was **0.65 million.**
- iii. Research project completed on optimal tillage practices funded by ALP-PARC at Karak and D.I.Khan. These studies are for a duration of three (2001-2004) years and the cost of the project was **2.5 million.**

8. ADMINISTRATIVE, ACADEMIC, TECHNICAL, FINANCIAL EXPERIENCE AND CONTRIBUTION IN THE UNIVERSITY MANAGEMENT

i. Chairman, Department of Agricultural Mechanization

- ❖ From June 20, 2017 for next three years
- ❖ From June 19, 2014 up to June 19, 2017)
- ❖ From April 15, 2009 to April 15, 2012

- **Provided professional, technical and administrative guidance to faculty, technical staff and B.Sc (Hons), M.Sc (Hons) and Ph.D students etc.**

- ❖ Establishment of Small computer laboratory for undergraduate and post graduate students.
- ❖ Generator repair training in summer vacation for undergraduate students.
- ❖ Computer hardware repair training program in summer vacation for undergraduate students.
- ❖ Updated and revised under graduate and post graduate courses.
- ❖ Developed a database for vehicle repair and maintenance management.

➤ **Teaching in the Islamic University of Afghanistan for one Semester
March 21, 2014**

➤ **Developed New Courses for under graduate and post graduate and Ph.D**

- ❖ Five new courses for undergraduate
- ❖ Four courses for postgraduate.
- ❖ Eight courses for Ph.D program.

ii. HEC Approved Ph.D Supervisor from 2012 onward

iii. Supervision of Ph.D, M.Sc (Hons) & B.Sc (Hons) students

- ❖ Ph.D : 1 supervised as a major member
- ❖ Ph.D : 2 Major Supervisor under process
- ❖ M.Sc (H) : 6 supervised as Major supervisor
- ❖ M.Sc (H) : 4 Major supervisor under process
- ❖ M.Sc (H) : 4 supervised as Co-supervisor
- ❖ B.Sc (H) : 11 supervised graduate Internship students

❖ **Ph.D students Major Member supervised:**

- i. Dr. Muhammad Ramzan Deptt. of Agric. Mechanization

❖ **Ph.D students under process:**

- i. Mr. Muhammad Hanif Ph.D thesis in final stage
- ii. Mr. Rafi ud Din, Ph.D research is going on

❖ **M.Sc (Hons) students supervised:**

- i. Mr. Muhammad Hanif
- ii. Mr. Muhammad Aamir
- iii. Mr. Fahimullah Khattak
- iv. Mr. Farmanullah

- v. Mr. Anees ur Rehman
- vi. Miss. Shazia Shiekh

❖ **M.Sc (Hons) students under process:**

- i. Mr. Waseem Sardar
- ii. Mr. Saqlain
- iii. Inayat ullah
- iv. Mr. Kaleem Ullah

iv. Technical Supervision of University Vehicles Repair & Maintenance Affaires

- ❖ Apart from academic activities, this department is also providing repair and maintenance service of more than 100 vehicles (buses, coasters, Hiaces, pickups, tractors, Suzaki van, Cars, as well as more than 10 Generators and UPS to the whole universities.

v. Assign a Duty of Transport Officer

- ❖ Assign a duty of transport Officer of the university vehicles from March 13, 2018 to March 22, 2019

vi. Assign a Duty of Director Edowment Fund

- ❖ Assign a duty of Director Endowment Fund of the university from December 27, 2018 to March 22, 2019

vii. Convenor and Member of Various Committees

- ❖ Member of the Institutional Schoalrship Award Committee (ISAC), Various Need Based Scholarships, The University of Agriculture, Peshawar
- ❖ Member of the Scrutiny Committee for hiring of staff of the AUPS Male & Girls Sections, The University of Agriculture, Peshawar
- ❖ Nomination of Technical Members for Evaluation of technical Proposals for Purchase/Installation of Various Items in Oliva ADP Projects. Plantation of Five Million Olive Saplings & Maintenance of Alive Model Farm Sangbhatti Mardan, ARI, Tarnab” Year 2018
- ❖ Member National Testing Services from 2010 till to date
- ❖ Convenor, Board of Studies, from September 2015 till to date
- ❖ Convenor, Board of Studies, 2009 -2012
- ❖ Member Board of Studies, from 2012 to Septmebr, 2015

- ❖ Member, Board of Faculty, from 2009 till to date
- ❖ Academic Council Member, from June 19, 2014 till to date
- ❖ Academic Council Member, from 2009 - 2011
- ❖ Farm Machinery purchase committee member, from 2009 to 2012
- ❖ Departmental B.Sc (Hons) and M.Sc (Hons) student's admission committee member
- ❖ Students Advisor M.Sc (Hons) and Ph.D

viii. Leadership Experience

- ❖ Managing Director, AUTF for two years from 2010 to 2012
- ❖ Secretary, AUTF, from June 2005 to June, 2008
- ❖ President, Agric. Univ. Teacher's Assoc., Peshawar (AUTA), 2005
- ❖ Elected three times as G. S., Agric. Univ. Teacher's Assoc., Peshawar (AUTA), 1991, 1999 and 2000
- ❖ Vice President, AUTA, 1992
- ❖ Elected as Syndicate Member from Lecturer Constituency, Agric.Uni., Peshawar, 1999-2000

ix. Managing Director, Agricultural University Teacher's Foundation (from February 15, 2010 to March 31, 2012)

- ❖ Pioneer of establishment of AUTF in 1998 as a General Secretary AUTA
- ❖ Secretary AUTF in 1998 - 1999
- ❖ Revision of AUTF constitution 1998
- ❖ Framing of rules for AUTF Election
- ❖ Framing of Rules for AUTF vehicles
- ❖ New scheme of AUTF vehicles
- ❖ Registration of AUTF Foundation
- ❖ Enhancement of Fund raising scheme
- ❖ Layout, Drawing and Map of AUTF Complex
- ❖ Job provided to 14 qualified and technical people
- ❖ Fund raised from 0.5 million to 4 million within two years
- ❖ AUTF construction Committee Member from 2010 till to date

x. Professional Technical experience in TIPAN Project (Transformation & Integration of Provincial Agricultural Net Work (from July 1987 to January 1993)funded by USA

- ❖ Technical support and facilitation in respect of repair & maintenance of farm machinery & tractors, generators, repair & installation laboratory equipments, upgradation of repair & maintenance workshop, purchase of farm machinery equipment & etc in all the Agriculture Research system of NWFP as well as to facilitate transport section of the university.

9. POST DOCTORAL FOREIGN TRAINING ONE YEAR IN USA (YEAR 2007)

- ❖ Impact of soil compaction on the physical properties of soil, root growth and physiology of plant under sandy loam soil.

10. PRE-DOCTORAL FOREIGN TRAINING ONE YEAR IN ITALY (YEAR 1993)

- ❖ Italian Language Course for 6 months in 1993
- ❖ Soil and Groundwater Protection in 1993
- ❖ Defence of Soil and Protection of Environment in 1993

11. PROFESSIONAL TECHNICAL TRAININGS COMPLETED

- ❖ Completed the training course on "Agro-meteorology" organized by the WAMA project of NWFP Agricultural University and the Wageningen Agriculture University, Netherlands held in Peshawar, July 13 - 22, 1996.
- ❖ Completed the training course on "Meteorological Station Operation and Data Management" organized by the WAMA project of NWFP Agricultural University and the Wageningen Agricultural University, the Netherlands held in Peshawar, July 23-24, 1996.
- ❖ Completed the 3 months pre-service training course on "operation, maintenance and calibration of farm machinery, equipment" organized by the Farm Machinery Institute, Islamabad, which was financially supported by NWFP Agricultural university, Peshawar, June - August, 1987.

12. PROFESSIONAL TECHNICAL TRAININGS ARRANGED

- ❖ Tractor and farm machinery maintenance training course was arranged to about more than 100 farmers in Farm Services Centre with the coordination of ICRC in 2012.

- ❖ Arrange tractor driving and maintenance course under TIPAN project for agriculture students in AUP Malakandher Farm in 1989-90. About 200 students were trained during this period.
- ❖ Meteorological training was arranged in each station with the concerned people in 1999-90.

13. PROFESSIONAL INTERNATIONAL LEVEL WORKSHOP ORGANIZED

- ❖ Organized a workshop on “Issues and challenges in Agricultural Education, Research and Environment in the next Millennium” held at Bara Gali from August 25 – 29, 1999.
- ❖ Organised International Seminar on “ Trends & Prospects of Higher Education in Pakistan” held at Bara Gali from August 16 to 23, 2005.

14. PROFESSIONAL INTERNATIONAL LEVEL CONFERENCES SEMINARS, AND WORKSHOP ATTENDED

- ❖ “Seminar on Agricultural Mechanization for Developing Countries” from July 7th to August 10th, 2016, Beijing, China.
- ❖ “Seminar on Cotton Processing and Trade for Developing Countries” from October 16th to November 12th, 2014 China.
- ❖ “Seminar on Machinery Industry for Officials and Entrepreneurs for Asian and European Countries” from May 15th to June 4th, 2014 China
- ❖ “Seminar on Renewable Rural Energy, Environment and Hygiene for Officials from Developing Countries” from September 5th to 25th, 2013 China.
- ❖ Attended ASABE an Annual International Conference held on June 17 – 20, 2007, at Minneapolis, USA.
- ❖ Attended a Conference on Conservation Agricultural System held on June 25 – 27, 2007 at the University of Florida, USA.
- ❖ Attended an International Symposium on Air Quality and Waste Management for agriculture held on September 15 – 19, 2007 at Broomfield, Colorado, USA.

15. PROFESSIONAL NATIONAL LEVEL CONFERENCE ORGANIZED

- ❖ Organized National Conference on Agricultural Problems and Food Security in the Changing Climate” held on Nov. 14-17, 2018, The University of Agriculture, Peshawar.

16. PROFESSIONAL NATIONAL LEVEL WORKSHOPS & CONFERENCES ATTENDED

- ❖ Participation in the workshop on “Project Formulation” organized by Pakistan Science Foundation February 8-9, 2012.
- ❖ Workshop on Higher Education Quality Assessment held on Dec, 13, 2011
- ❖ Participation in workshop on “Development of Sustainable and collaborative Research Networks” held on September 29-30, 2010 sponsored by the British Council, HEC and AUP
- ❖ Paper presentation and participation in a conference on “ Response to Challenges of Globalization in Agriculture” held on July, 2 - 7, 2008 organized by AUTA, AUP.
- ❖ Organised training by AUP on “Understanding the use of the Internet and up keeping the networking system” from February 21 - 23, 2008.
- ❖ Organised a workshop by AUP on “Research Report Writing and Presentation in Plant Sciences” held at AUP for one week March 10 - 15, 2008.
- ❖ Organised a workshop by AUP on “quality Assurance- Self Assessment Procedure” held at AUP for one day March 18, 2008.
- ❖ Organised at the 12th Congress of soil science held on October, 20 – 23, 2008 by Soil Science Society of Pakistan at AUP from July 2 to 7, 2008.
- ❖ Workshop on Technical Writing held on May 17, 1990.

17. PROFESSIONAL SOCIETY MEMBERSHIP:

- ❖ American Society of Agricultural Engineering and Biological Engineering from January 2007 onward
- ❖ Soil Science Society of Pakistan from January 2008 onward

18. Editorial Board Member in International Journals:

- ❖ Horizon Research Publishing, USA from September, 2014 onward
- ❖ Associate Editor, Sarhad Journal of Agriculture, University of Agriculture, Peshawar
- ❖ Member of The Editorial Board, International Journal of Bio- Sciences and Technology. (IJBST) ISSN: 0974-3987. www.ijbst.org

19. BOOK PUBLISHED:

- i. Introduction to Petroleum Technology
- ii. Effect of tillage practices on yield of wheat and maize rotation

20. PROJECTS REPORTS PUBLISHED:

- i. Khan, M. J. and M. Khan Khattak, 2003, Final progress Report on “Optimal tillage practices for wheat-fallow and chickpea-fallow rotation in Southern NWFP”.
- ii. Khan, M. J. and M. Khan Khattak, 2004, Third Annual progress Report on “Optimal tillage practices for wheat-fallow and chickpea-fallow rotation in Southern NWFP”.
- iii. Khan, M. J. and M. Khan Khattak, 2003, Second Annual progress Report on “Optimal tillage practices for wheat-fallow and chickpea-fallow rotation in Southern NWFP”.
- iv. Khan, M. J. and M. Khan Khattak, 2002, First Annual progress Report on “Optimal tillage practices for wheat-fallow and chickpea-fallow rotation in Southern NWFP”.

21. METEOROLOGICAL REPORTS PUBLISHED:

- i. Khattak, M. K. and M.J. Khan, 1992. "Meteorological observation NWFP Agricultural University research stations, No. Vol. 1, Met/02/92.
- ii. Khattak, M. K. and M.J. Khan, 1992. "Meteorological observation NWFP Agricultural University research stations, No. Vol.3, Met/06/92.

- iii. Khattak, M. K. and M.J. Khan, 1992. "Meteorological observation NWFP Agricultural University research stations, No. Vol.4, Met/08/92.
- iv. Khattak, M. K. and M.J. Khan, 1992. "Meteorological observation NWFP Agricultural University research stations, Vol. 5, Met/12/92.

22. PUBLICATIONS IN PROCEEDING/CONFERENCE/WORKSHOP

- i. Data-based Sensing of Composition and quality of Product in Biodiesel Production. 2018). Proceeding of the 4th International Conference on Power Generation System and Renewable Energy Technologies (PGSRET) 10-12 September, 2018. Islamabad, Pakistan. 1 – 6.
- ii. Khattak, M. K (2008). An overview of wind energy. Proceeding of the Conference on Response to challenges of globalization in agriculture. 299 – 344.
- iii. Khattak, M. K., M. Khan and M. Hanif (2010). Development of small scale flat plate solar collector for agricultural purposes. International Conference on Energy Systems Engineering. College of Electrical and Mechanical Engineering. NUST. 50 – 58.

23. RESEARCH PAPERS PUBLISHED IN NATIONAL AND INTERNATIONAL JOURNALS: (51)

A. Impact Factor Journals (14)

- 1. Mansoor, K. K, M. hanif, M. Khan, M. Ramzan and Abdur R., (2019). Comparison of drying process and preservatives on drying kinetics, texture and antioxidants retention in Mulberry fruits. *The J. Anim. Plant Sci.* 20(4): .
- 2. Hanif, M., M. K. Khattak, I. Haq, K. Gul, A. Khan, K. Ullah, A. Khan and A. Ali (2019). Effect of Temperature and water purity on germination and yield of Mungbean Sprouts. *Sains Malaysiana* 48(4): 711-717.
- 3. Ahmad, I., A. Ayub. U. Ibrahim, M.K. Khattak and M. Kano (2019). Data-Based Sensing and Stochastic Analysis of Biodiesel Production Process. *Energies* (doi:10) 12 (63): 1-13
- 4. Hanif, M., M. K. Khattak, M. Khan, M. Ramzan and A. Rab (2018). Energy, Exergy and Efficiency Analysis of a Flat Plate Solar Collector Used as Air Heater. *Sains Malaysiana* 47(5): 1059–1065.

5. Saeed, M., H. Huang, M. Ali, M. K. Khattak, Z. Huang, C. Zhang and S. Wei (2018). Growth Dynamics of Maize (*Zea Maize*) and Weeds in Response to Different Nitrogen Levels and Weeding Intervals. *Pak. J. Bot.* 50 (4). 1343-1346.
6. Afsar, M. A., S. K. Khalil, S. Wahab, I. H. Khalil, A. Z. Khan & M. K. Khattak (2017): Impact of Various Ratio of Nitrogen and Sulfur on Maize and Soil pH in Semi-arid Region. *Communications in Soil Science and Plant Analysis.* 48 (8): 825 - 834
7. Hanif, M., M.K. Khattak, M. Amin, M. Ramzan, . Zakir, S. Ullah and Z. Khan (2016). Development of an efficient Flate Plate solar Air heater for drying and water heating purposes. *Sains Malaysiana* 45(3): 489 – 497.
8. Khalil, S, K., S. Rahman, A. Rehman, S. Wahab, M.K. Khattak, I.H. Khalil, A. Z. Khan and Amanullah (2015). Osmoconditioning improve germination, assimilate partitioning and harvest index of wheat under drought. *International J. of Biosciences (ISSN: 2220-6655).* 6(7): 44 -57.
9. Wahab, S., M. K. Khattak, S. K. Khalil and Fahimullah. (2014). Effect of Cowpea Flour Supplementation on the Nutritive Value of whole wheat flour leavened bread. *World Journal of Pharmaceutical Research.* 3(3): 4393-4403.
10. Fahim, U., M. K. Khattak and M. Khan. (2014). Development and Performance of a Parabolic Trough Solar Water Distillation Unit. *International Journal of Renewable and Sustainable Energy.* 1(1): 20-25.
11. Gul, H., Z. Shah, D. Muhammad, R. A. Khattak and M. K. Khattak. (2013). Micronutrients losses from Soil under Sub surface Drainage System. *Communications in Soil Science and Plant Analysis.* 44: 2546 – 2559.
12. Khan, A. Z., A. Nigar, S. K. Khlail, S. Wahab, A. Rab, M.K. Khattak and T. Henmi (2013). Influence of Synthetic Zeolite Application on seed development profile of soybean grown on allophonic soil. *Pak. J. of Bot.,* 45(3):1065 – 1068.
13. Rab. A., J. Rehman, S. Abdiani, A. Qadim, M.K. Khattak and K. Nawab. (2012).Thinning Intensity Affects The Yield And Fruit Quality Of Apricot Cv. Trevett 2012. *Pak. J. of Bot.,* 44(3): 887-890.
14. Rab, A., M. Sajid, N.U.Khan, K. Nawab, M.Arif. and M.K. Khattak. (2012). Influence of storage temperature on fungal prevalence and quality of citrus fruit (CV. Blood Red). 2012. *Pak. J. of Bot.,* 44(2): 831-836.

B. HEC Recognized International and National Journals (37)

1. Hanif, M., A. Hadi and M. K. Khattak (2016). Impact of storage on physico-chemical and organoleptic attributes of peanut milk preserved with different levels of nisin”. JAR. 54(3).
2. Hanif, M., M. K. Khattak, M. Rehman, M. Ramzan, M. Amin, M. Aamir, S. A. Ali, S. Sheikh, Hafizullah, S. Khan, M. Saeed, A. Khan and M. Saqlain. (2015). Impact of Drying Methods and Extraction Solvents on the Steroidal Saponians Content of *Tibullus terresteris* Grown in the Peshawar Valley of Khyberpakhtunkhwa, Pakistan. Journal of Science, Tech. and Dev. 34 (3): 140-146.
3. Hanif, M., M. K. Khattak, M. Rehman, M. Ramzan, M. Amin, M. Aamir, S. Shiekh. Hafizullah, S. Khan, M. Saeed, A. Khan, and M. Saqlain (2015). Effect of Drying Temperature and Natural Preservatives on Reducing Aflatoxins in Solar Dried Persimmon (*Diospyros kaki* L.). Proc. of the Pak. Aca. of Sci. 52 (4): 359–36.
4. Lubna, H., Fahimullah and M. K. Khattak (2015). Prevalence and Molecular Detection of *Giardia* in different Sources of water. Science, Technology and Development. 34(1): 41 – 45
5. Hanif, M., M.K. Khattak, S. A. Ali, M. Z. Khan, M. Ramzan, M. Amin and M. Aamir (2015). Impact of drying temperature and slice thickness on retention of vitamin C in Persimmons (*dispyros kaki.l*) dried by a flat plate solar collector. P. J. of Food Sciences. V.(25): 66 – 70.
6. Saeed, M., M. Iqbal, M. Haroon, Z. Hussain, M. Buriro, M. Memon, M.K. Khattak, S. Ahmad and I. Khan (2015). Influence of synthetic and bioherbicides on management of hrse purslane (*Trianthema portulacastrum* L.) Pak. J. of Weed Science Research, Weed Science Society of Pakistan.: 1 – 10.
7. Hanif, M., M. K. Khattak, M. Rehman, and M. Khan (2015). Evaluation of existing thin layer drying models on drying kinetics of persimmons (*Diospros Kaki.L*) Journal of Agricultural Research. 53(2): 112 – 117.

8. Hanif, M., M. K. Khattak, M. Rehman, M. Aamir, M. Ramzan, M. Amin, M. Khan and S. Sheikh (2015). Convective Drying of Chilies using a concentrating solar collector. *Proceeding of the Pakistan Academy of Sciences* (ISSN: 0377 – 2969). 52(2): 103 – 107.
9. Khattak, M. K., and Fahimullah (2014). Maintenance and Repair Cost of Company Wise Vehicles: A Case Study of the University of Agriculture Peshawar, Pakistan. *Int. J. of Engg. Works.* 1(3): 56 – 63.
10. Hanif, M., M. K. Khattak, M. Rehman, M. Rehman, S. Sheikh, Hafizullah, S. Khan, M. saeed, A. Khan and M. Saqlain (2014). Impact of Type and particle size on the protein contents in wheat flour. *J. of Science, Technology and Development.* 33(3): 107 – 109.
11. Hanif, M., M. K. Khattak and M. Rahman. (2014). Modeling the solar irradiance at different tilts on Peshawar, Pakistan. *ISESCO Journal of Science and Technology.* 9(17): 23-27.
12. Hanif, M., M. K. Khattak, M. Rahman, M. Khan, M. Amin and M. Ramzan. (2014). Performance Evaluation of a Flat Plate Solar Collector as a Drier for Chilies and Tomatoes. *Journal of Science, Technology and Development.* 33(2): 63 - 67.
13. Hanif, M., M. Rahman, M. K. Khattak, M. Ramzan, M. Amin and K. Khan. (2013). Convective Drying and Mathematical Modeling of Onions Dried Using a Flat Plate Solar Air Heater. *Pakistan Journal of Nutrition.* 12 (11): 11-19.
14. Khan, F., A. Iqbal, Naveedullah, M.K. Khattak and W.J.Zhou. (2011). Physico-chemical properties and fertility status of water eroded soils of Sharkul area of district Mansehra, Pakistan *Soil Environ.* 30 (2): 137-145.
15. Jamali, L.A, M. K. Khattak, M. B. Jamali, S. H. Chattah and G. S. Bughio (2011). Technology and its Impact on Agriculture Production. *Life Sci. Int. J.* 5(1): 2022 - 2025.
16. Wahab, S., S. Khan, M.K. Khattak, Aurangzeb, N. Ahmad and F. Habib (2007). Nutritional qualities of different wheat varieties grown in North West Frontier Pakistan. *Sarhad J. of Agric.* 23(4): 1131-1136.

17. Khan, M. Z., A. R. Ghumman, M. K. Khattak and G.D. Khan (2007). Use of hydrodynamic modeling to assess the performance of Dagai distributary of Maira branch of upper Swat Canal irrigation system. *Sarhad J. of Agric.* 23(4): 1061-1065.
18. Ghumman, A. R., M. Z. Khan, G. D. Khan and M. K. Khattak (2007). Assessment of supply and irrigation demand for Dagai distributary of the Maira branch of upper Swat canal irrigation system. *Sarhad J. of Agric.* 23(2): 371-375.
19. Khattak, M. K., A.Q. Mughal, L.A. Jamali, S.A. Khan and M. K. Zubair (2007). Economic evaluation of deep and shallow tillage practices under maize fallow rotation. *Sarhad J. of Agric.* 23(2): 365-370.
20. Khattak, M. I and M. K. Khattak (2006). Language teaching methodologies based on empiricist approach. *Sarhad J. of Agric.* 22(2): 24-31.
21. Jamali, L.A, M. Khan, H. R. Mangio and K. A. Ibupoto (2006). Improving the aggregates stability and compressive strength by stabilization of soil. *Pak. J. Agri., Agril. Engg., Vet. Sc.* 22(1): 36 –39.
22. Khan, S., M. Idrees, K. Nawab, M. Khattak and M. Ramzan (2006). The adoption of Modern agricultural machinery: A comparative study of small, medium and large farmers in union council Palosi, district Peshawar. *Sarhad. J. of Agric.* 22(2): 353 –359.
23. Khattak, M.K., M.J. Khan, M.J. Khattak, M. Asrar and M. Ibrahim (2006). Economic Evaluation of deep tillage and shallow tillage practices during wheat crop production. *Sarhad. J. Agric.* 22(1): 156 – 162.
24. Khan, M.J. M.K. Khattak and S. Wahab (2006). Influenced of Various Tillage Practices on Selected Physical properties of Sandy Loam Soil Under Rainfed Area. *Sarhad. J. Agric.* 22(1): 71 – 79.
25. Khattak, M.K., M.J. Khan and M. S. Khan (2006). Impact of Various Tillage Practices on Soil Moisture Content, Bulk Density And Soil Strength on Clay loam Soil Condition Under Rod-Kohi Area Of D. I. Khan. *Sarhad. J. Agric.* 22(1): 61–69.
26. Khattak, M.K. and M.J. Khan (2005). Effect of Different Tillage Practices on Weeds and Yield of Chickpea under Sandy loam. *Pak. J. Weed Sci. Res.* 11 (3 - 4): 157 –164.

27. Khattak, M.K., M.J. Khan, M. Asrar, S. Wahab and M. Ramzan (2005). Enhancement of wheat yield and yield components by controlling weeds with deep tillage practices under irrigated clay loam soil condition. *Pak. J. Weed Sci. Res.* 11(3 - 4): 131 – 136.
28. Khattak, M.K., M.J. Khan, M.S. Somroo, L.A. Jamali and M.S. Khan (2005). Influence of Various Tillage practices on Weed Control to Increase Maize Production Under Irrigated Conditions. *Pak. J. Weed Sci. Res.* 11(1-2):49-53.
29. Khan, M. Z, M. K. Khattak, M. J. Khan and M. Asrar (2005). Comparison of water supply and demand for the rabi season at tertiary level in the command of the Jui Shaikh canal irrigation system. *Sarhad J. Agric.* 21(3), 2005: 418 – 423.
30. Khan, G. D., N. Ullah, A. Malik and M. K. Khattak (2005). Assessment of general performance indicators of irrigation supply and demands and their impacts on major crop yield in a controlled subsurface drainage area of Mardan SCARP. *Sarhad J. Agric.* 21(3), 2005: 425 - 436.
31. Khattak, M. K., A. Q. Mughal, M. J. Khan, S. B. Bhukhari and G. D. Khan, 2004. Effect of various tillage practices on selected physical properties in clay loam soil under wheat – maize rotation. *Sarhad J. Agric.* 20 (2): 233 - 241.
32. Khattak, M. K., M. J. Khan, A. Q. Mughal, S. B. Bukhari and M. T. Jan., 2004. Influence of various tillage practices on yield of wheat-maize under clay loam soil condition. *Sarhad J. of Agric.* 20 (3): 429 - 433.
33. Khan N. P., M. K. Khattak and T. A. Khattak (2001). Economic analysis of meat retailing business in district Peshawar, NWFP, Pakistan. *Sarhad J. of Agric.* 17(2): 277 - 281.
34. Rehman. M., M. A. Khan and M. K. Khattak (1995). Effect of different tillage operations on emergence and yield of wheat. *AMA.* 26(2): 62 – 64.
35. Khattak, M. K., and M. Ramzan (1995). Effect of different tillage implements combination on fuel consumption and yield of maize. *Sarhad J. of Agric.* 17(2): 277 - 281.

- 36.A. Rehman, P. Shah and M. K. Khattak (1991). Effects of nitrogen, phosphorous and potassium on yield and yield components of triticale. J. of Sci.& Tech. Univ. Peshawar. 15 (3): 230 - 234.
- 37.Khan. A. Z., Khattak, M. K., M. Tariq and J. Zeb. 1990. Study of water losses before and after improvement of watercourses. Sarhad J. of Agric. 6 (3): 227 - 230.