

প্রকাশনা তালিকাঃ

1. Publications

1.1 Journal articles

The list of journal articles is given below (*descending order of publishing year*):

Ali, M. H. (2017). Groundwater quality of different locations of Bangladesh. *Sustainability, Agriculture, Food and Environmental Research*, 5(4): 1-21 DOI:

Ali, M. H. and S. Mubarak (2017). Approaches and Methods of Quantifying Natural Groundwater Recharge – A Review. *Asian J. Environ. & Ecology*, 5(1): 1-27. DOI: 10.9734/AJEE/2017/36987

Ali, M. H. and S. Mubarak (2017). Effective rainfall calculation methods for field crops: An overview, analysis and new formulation. *Asian Res. J. of Agric.* 7(1): 1-12. DOI: 10.9734/ARJA/2017/36812

Ali, M. H. (2017). Quantifying natural groundwater recharge using tracer and other techniques. *Asian Journal of Environment & Ecology*, 5(1): 1-12, DOI: 10.9734/AJEE/2017/ 36811

Ali, M. H., S. Mubarak, M. A. Islam, P. Biswas (2017). Comparative evaluation of various empirical methods for estimating groundwater recharge. *Archives of Current Research International*, 11(1): 1-10. DOI: 10.9734/ACRI/2017/37432

Ali, M. H. (2017). Irrigation water management of some salt tolerant rice cultivars for higher yield. *Asian J. of Adv. Agril. Research*, 3(4): 1-7. DOI: 10.9734/AJAAR/2017/35860.

Ali, M. H. (2017). Response of Chickpea Varieties to Different Irrigation Regimes. *Asian Journal of Advances in Agricultural Research*, 2(4): 1-7. DOI: 10.9734/AJAAR/2017/35861

Ali, M. H. (2017). Irrigation management for optimizing onion seed production. *Asian Research Journal of Agriculture*. 6(2): 1-6. DOI: 10.9734/ARJA/2017/35863

Ali, M. H. (2017). Saline irrigation-water management strategy in wheat cultivation for higher yield and water productivity. *International Journal of Engineering Research And Management (IJERM)*, 4(6): 25-32

Mila A. J., M. H. Ali, A. R. Akanda, M.H.Rashid and M. A. Rahman (2017). Effects of deficit irrigation on yield, water productivity and economic return of sunflower. *Cogent Food & Agriculture* (2017), 3: 1287619

Hasanuzzaman, M., X. Song, D. Han, Y. Zhang, S. Hussain (2017). Prediction of Groundwater Dynamics for Sustainable Water Resource Management in Bogra District, Northwest Bangladesh. *Water* 9(4), 238; doi:10.3390/w9040238.

Ali, M. H. and M. A. Rahman (2016). Design and construction of low-cost raised-bed drainage lysimeter for crop-water relations and hydrological studies. *International Journal of Current Science and Technology*, 4(3): 184-187

Sadia, M. and M. H. Ali (2016). Recent trend of reference evapotranspiration in the north-eastern region of Bangladesh. *Journal of Basic and Applied Res. Int.*, 19(1): 10-19

Milla, J., M.H. Ali (2016). Yield response factor of sunflower under deficit irrigation at different growth phases. *American J. of Exp. Agric.*, 11(2): 1-12. DOI:

Milla, J., M.H. Ali (2016). Irrigation-yield response factor of processing potato for different phonological growth stages. *American J. of Engg. Res.*, 5(2): 27-34

Mila, A.J., M.H. Ali (2016). Irrigation-yield response factor of mustard at different growth phases. *Int. J. Expt. Agric.* 6(1): 15-21

Mila, A. J., A. R. Akanda1, S. K. Biswas and M. H. Ali (2016). Crop Co-efficient Values of Sunflower for Different Growth Stages by Lysimeter Study. *British Journal of Environment & Climate Change*, 6(1): 53-63

Asraf, T., M. H. Ali (2015). Water-table dynamics and trend in three Upazilas of Rajshahi district (Barind area), Bangladesh. *Asian Academic Research Journal of Multidisciplinary*, 2(6): 286 -310

Ali, M. H., I. Abustan. 2014. A new novel index for evaluating model performance. *J. of Natural Resour. and Dev.*, 04: 1-9

Ali, M.H., I. Abustan, M.H. Zaman, A.K.M.R. Islam, A. AlBassam. 2014. Optimising irrigation water for field crops to maximize the yield and economic return. *Global Advanced Research Journal of Agricultural Science*, 3(8): 223-232

Ali, M. H., Islam, A.K.R.M., Zaman, M.H. 2014. Improving soil hydraulic properties for better agricultural water management and crop Production – A review. *International Journal of Engineering and Technical Research (IJETR)*, 2(6): 30-34

Ali, M. H., I. Abustan. 2013. Irrigation management strategies for winter wheat using AquaCrop model. *J. of Natural Resour. and Dev.*, 03: 106-113

Ali, M. H., A.A.Sarkar, M. H.Zaman, M. A. Rahman. 2013. Impact of irrigation schedules on seed yield, water use and water productivity of mustard mutants. *Bangladesh J. of Nuclear Agric.*, 27 & 28: 63-72

- A.A. Sarkar, M. Hasanuzzaman, M.A. Rahman, J. Nain, N.N. Karim and M.H. Ali (2013). Increasing Cropping Intensity and profitability in Dry Barind Area of Bangladesh, Utilizing Profile Soil Moisture and Supplemental Irrigation. *Bangladesh J. Nuclear Agric.* 27 &28: 103-118.
- Ali, M. H., I. Abustan, S. Islam. 2013. Simulation of upward flux from shallow water-table using UPFLOW model. *J. of Natural Resour. and Dev.*, 03: 123-127
- Ali, M. H., A.A. Sarkar, M.A. Rahman. 2012. Analysis on groundwater-table declination and quest for sustainable water use in the North-western region (Barind area) of Bangladesh. *J. of Agril. Sci. and Applications.* 1(1):26-32
- Karim, N. N. and Sarkar, A. A. 2011. Study on thermal and radiation based indices in relation to seed yield of mustard in different AEZ of Bangladesh. *J. Institution of Engineers*, Vol. 39/AE(1): 29-36.
- Ali, M. H., I. Abustan, M.A. Rahman, A.A.M. Haque. 2011. Sustainability of Groundwater Resources in the North-Eastern Region of Bangladesh. *Water Resour. Manage.* 26:623–641
- Ali, M.H., H. Paul, M.R. Hoque. 2011. Estimation of evapotranspiration using BUDGET model. *J. Bangladesh Agril. Uni.* 9(2): 257-266
- Sarkar, A. A. and M. H. Ali, 2010. Irrigation management for optimizing rice yield and nitrate leaching. Proceedings of Paper Meet, Agricultural Engineering Division, IEB, pp: 91-98.
- Sarkar, A. A. and M. H. Ali. 2009. Water table dynamics of Dhaka city and its long- term trend analysis using the “MAKESENS” model. *Water International*; 34(3):373-382.
- Ali, M.H. 2009. Irrigation – yield response factor of winter wheat for different growth stages. *J.Agrometeorology*, 11(1): 9 – 14
- Ali, M.H. A.K.M. Adham, M.M. Rahman, A.K.M.R. Islam. 2009. Sensitivity of Penman – Monteith estimates of reference evapotranspiration to error in input climatic data. *J.Agrometeorology*, 11(1): 1 – 8
- Karim, N. N., Talukder, M. S. U., Hassan, A. A. and Khair, M. A. 2009. Temporal trend of wind speed due to changes of climate in North Central Hydrological Region of Bangladesh for predicting reference crop evapotranspiration. *Bangladesh J. Agril. Sci.* 36(1):85-92.
- Karim, N. N., Talukder, M. S. U., Hassan, A. A. and Khair, M. A. 2009. Long-term trend of incoming net short-wave solar radiation in North Central Hydrological Region of Bangladesh. *Bangladesh J. Agril. Sci.* 36(1):93-100.
- Karim, N. N., Talukder, M. S. U., Hassan, A. A. and Khair, M. A. 2009. Climate change and its impacts on actual crop evapotranspiration of boro rice in North Central Hydrological Region of Bangladesh. *J. Agril. Engg.*, The Institution of Engineers, 37/AE:73-82.
- Ali, M. H., M.R. Hoque, A. A. Hassan and M.A. Khair. 2008. Effective management of water in wheat cultivation under water-limiting condition. *J. of the Institution of Engineers, Bangladesh*, Vol. 34/AE, 1- 11
- Ali, M.H. and M.S.U. Talukder. 2008. Increasing water productivity in crop production – A synthesis. *Agric. Water Manage.* 95: 1201 – 1213

- Karim, N. N., Talukder, M. S. U., Hassan, A. A. and Khair, M. A. 2008. Temporal trend of reference crop evapotranspiration due to changes of climate in North Central hydrological region of Bangladesh. *J. Agril. Engg.*, The Institution of Engineers, 34/AE:91-100.
- Karim, N. N. 2008. Long-term incoming solar radiation trend in North Central hydrological region of Bangladesh. *Bangladesh J. Agri. Engg.*, 19 (1&2): 57-67.
- Sarkar, A. A., A. A. Hassan, M. H. Ali, N.N.Karim, M. H. Zaman and M. A. Rahman, 2008. Long-Term Water Table Fluctuation Pattern and Trend Analysis in the Old Brahmaputra Flood Plain Aquifer. *Journal of Agricultural Engineering*, The Institution of Engineers, Bangladesh.Vol.34/AE:13-24.
- Ali, M. H., M.R. Hoque, A. A. Hassan and M.A. Khair. 2007. Effects of deficit irrigation on wheat yield, water productivity and economic return. *Agric. Water Manage.*, 92: 151- 161
- Ali, M. H., M.R. Hoque, A. A. Hassan and M.A. Khair. 2007. Crop coefficient of winter wheat at different growth stages in a humid sub-tropic environment. *Int. J. Bio-Research*, 2(1): 36 – 46
- Ali, M.H, A.K.M.R. Islam and M.G.M. Amin. 2007. Trend of temperature and rainfall over Bangladesh during the last five decades. *J. Agrometeorol.*,9(1): 26-33.
- Ali, M.H. and A.K.M.Adham. 2007. Impact of climate change on crop water demand and its implication on water resources planning. *J. Agrometeorol.*, 9(1): 20-25
- Rahman, M.M., M. H. Khan, M. H. Ali. 2007. Modeling actual evapo-transpiration of wheat under soil moisture stress. *Int. J. BioResearch*, 3(3): 1- 7
- Hassan, A. A., M. H. Ali, A. A. Sarkar and M. N. Karim. 2006. Precast ferrocement channel sections as an alternative for channel lining in private sector irrigation of Bangladesh. *Bangladesh J. Agri. Engg.* 17(1&2): 19-30.
- Karim, N. N. 2006. Battery charging and discharging characteristics in drip irrigation system using solar energy. *Bangladesh J. Agril. Sci.*, 32(2):233-240.
- Sarkar, A. A. 2006. Study on water table fluctuation and recharge potentiality for sustainable groundwater development in greater Dinajpur district. *J. of The Institution of Engineers*. 32/AE : 95-102.
- Sarkar, A. A. and. Hassan, A. A. 2006. Water quality assessment of a groundwater basin in Bangladesh for irrigation use. *Pakistan Journal of Biological Sciences* 9(9): 1677-1684.
- Ali, M.H., M.G.M. Amin. 2006. AmanGrow: a simulation model to predict Aman rice production in Bangladesh. *Ind. J. Agric. Sci.*, 76(1): 50 – 51
- Ali, M.H., M.G.M. Amin. 2006. Simulation of Aus rice production based on weather data. *J. of the Institution of Engineers, Bangladesh*. Vol. 32/AE, 19 – 25
- Islam, A.K.M.R., M.H. Ali and M.G.M. Amin. 2006. Trend of temperature at three locations of Bangladesh. *J. Bangladesh Agril. Uni.*,4(1): 123 – 129
- Karim, N. N. and Kouichi, T. 2005. Micro sprinkler irrigation using solar energy. *Bangladesh J. Agril. Sci.*, 32(1):113-120.
- Karim, N. N., Hoque, K. A. and Bhuiya, S. H. 2005. Solar and wind energy resources in Bangladesh. *Bangladesh J. Agri. Engg.*, 16(1 & 2): 1-17.

- Karim, N. N., Kouichi, T. and Matsushita, T. 2005. Amelioration of stored rainwater by artificial zeolite and acidic electrolyzed water using solar energy. *Bangladesh J. Agri. Engg.*, 16(1 & 2): 19-24.
- Adham, A.K.M., M. H. Ali, and F. Khanam. 2005. Solar radiation and potential crop production at Comilla region of Bangladesh. *J. Bangladesh Agril. Univ.* 3(1): 149 – 154
- Ali, M. H., M.G.M. Amin and A.K.M.R. Islam. 2005. Reference evapotranspiration over Bangladesh and its implication in crop planning. *J. Bangladesh Agril. Uni.* 3(1): 139 – 147
- Ali, M.H. 2005. CropET₀: a computer model to estimate reference evapotranspiration from climatic data. *Bangladesh J. of Agril. Engg.*, 16(1 & 2): 25 - 37
- Ali, M.H. 2005. E-STAT: a computer program to perform statistical analysis of experimental data. *J. Bangladesh Agril. Univ.* 3(1): 133 - 138
- Ali, M.H., A.K.M. Adham and M.S.U. Talukder. 2005. Estimation of solar radiation from climatic parameters. *Bangladesh J. Agril. Sci.* 32(1): 99 -104
- Ali, M.H., A.K.M. Adham and S.H. Bhuiya. 2005. Simulation of solar radiation from temperature. *J. Bangladesh Agril. Uni.*, 3(2):327 - 332
- Ali, M.H., M. Hassanuzzaman, S.H. Bhuiya and F. Khanam. 2005. Evaluation of agro-climatic condition for rice cultivation in different regions of Bangladesh. *Bangladesh J. Env. Sci.*, 11(1): 16 – 21
- Ali, M.H., M.G.M. Amin and A.K.M.R. Islam. 2005. Probability analysis of monsoon and off-monsoon rainfall and crop planning in Bangladesh. *Bnagladesh J. Env. Sci.*, 11(2): 290 - 295
- Ali, M.H., A.K.M.R. Islam, M. Hassanuzzaman and S.H. Bhuiya. 2005. Adaptation of FAO temperature method for estimating reference crop evapotranspiration (ET₀) under Bangladesh condition. *Bangladesh J. Env. Sci.*, 11(1): 22 - 24
- Delwar K. M.Hossain, I. Yoshida, M. Harada, A. A. Sarkar, M. N. H. Miah, A. H. M. Razzaque, Md. Imtiaz Uddin, Kelali Adhana and Mst Farida Perveen. 2005. Growth and uptake of arsenic by rice irrigated with As-contaminated water. *Journal of Food, Agriculture & Environment*, Vol. 3 (2): 287 - 291
- Sarkar, A.A., A.A. Hassan, N.N. Karim and M.H. Ali. 2004. Studies on groundwater potentials for some micro-basins of BINA: II. Water table fluctuation and its response to rainfall for sustainable use. *J. of The Institution of Engineers, Bangladesh*, 31/AE (1) : 65-74
- Adham, A.K.M., M. H. Ali, M.S.U. Talukder and M. A. Hye. 2004. Solar radiation and potential crop production in the Rangpur region of Bangladesh. *J. Bangladesh Soc. Agril. Sci. & Technol.* 1(1&2): 121 - 125
- Ali, M. H., A.K.M. Adham and M.S.U. Talukder. 2004. Solar radiation and potential crop production at Mymensingh. *Bangladesh J. Agril. Sci.* 31(2): 239 – 243
- Ali, M. H., M.G.M. Amin and A.K.M.R. Islam. 2004. Comparison of various methods for estimating reference crop evapotranspiration. *J. Bangladesh Agril. Univ.* 2(2): 313-324
- Ali, M. H., M.R. Hoque, A. A. Hassan and M.A. Khair. 2004. Water saving through optimal sequencing of deficit irrigation in wheat. *Bangladesh J. Agri. Engg.* 15(1& 2): 11 – 18

- Amin, M.G.M., M. H. Ali and A.K.M.R. Islam. 2004. Agro-climatic analysis for crop planning in Bangladesh. *Bangladesh J. Agri. Engg.* 15(1& 2): 31- 40
- Amin, M.G.M., M. H. Ali, and A.K.M.R. Islam. 2004. Rainfall pattern and probability analysis of South-east and South-west regions of Bangladesh. *Bangladesh J. of Agrc. Sci.*, 31(2): 211 - 218
- Muminah, F. R., A. A. Sarkar, M. Ahmed, M. A. Rahman and P. Biswas (2014). Studies on Agro-Climatic parameters for crop planning at three locations of Satkira, Hatia and Maizdicourt. *Bangladesh J. Nuclear Agric.* 30: 129-141, 2014
- Islam, A.K.M.R., M. H. Ali and M.G.M. Amin. 2004. Long-term variability of rainfall at different agro-ecological regions of Bangladesh. *J. Bangladesh Soc. Agril. Sci. Technol.* 1(1&2): 19 - 24
- Hassan, A. A., M. H. Ali, S. H. Bhuiya and M. S. Ullah. 2003. Design and construction of ground water level indicator for geo-hydrologic studies. *Bangladesh J. Agri. Engg.* 14 (1 & 2): 1-7
- Hassan, A. A., N. N. Karim M. A. Hamid and M. A. Salam. 2003. Soil Water Management and Conservation Practices Towards New Cropping Pattern in Drought Prone areas of Bangladesh. *Pakistan Journal of Agronomy* 2(2): 77-84.
- Sarkar, A. A., A. A. Hassan, M.H. Ali and N.N. Karim. 2003. Studies on groundwater potentials for some micro-basins of BINA: I. An assessment of water quality for irrigation. *J. of The Institution of Engineers, Bangladesh*, 30/AE (1): 51-60
- Hassan, A. A. and N. N. Karim. 2002. Water management practices for crop production in seasonal saline soil of Khulna. *Bangladesh J. Agri. Engg.* 13(1&2): 21-26.
- Hassan, A. A., A. A. Sarkar and M. H. Ali and N. N. Karim. 2002. Effect of Deficit Irrigation at Different Growth Stages on the Yield of Potato. *Pakistan Journal Biological Sciences* 5(2):128-134.
- Hassan, A. A., K. Habib and M. S. U. Talukder. 2002. Groundwater resources assessment for development planning of tubewell irrigation system in Fulbaria upazila. *J. The Institution of Engineers, Bangladesh*. 29/AE (1): 29-35.
- Sarkar, A. A., A. A. Hassan, M. H. Ali, and N. N. Karim. 2002. Supplemental irrigation for Binashail rice cultivation at two agro-ecological zones of Bangladesh. *Bangladesh J. Agril. Sci.* 29(1): 95-110.
- Sarkar, A. A., M. H. Ali and A. A. Hassan. 2002. Suitability of groundwater for irrigation use in four Upazilas of Magura district. *J. of The Institution of Engineers*. 29/AE (1): 93-100.
- Ali, M. H. 2002. Sunshine: A computer program of calculating sunshine duration parameters for evapotranspiration models. *Bangladesh J. Agri. Engg.* 13(1&2): 73-78
- Hassan, A. A. and N. N. Karim. 2001. Field water balance in wheat cultivation. *J. Applied Irrigation. Sci.* (Germany) 36(2):203-211.
- Hassan, A. A., N. N. Karim, A. A. Sarkar and M. H. Ali. 2001. Effect of waterlogging on the growth and yield of summer grown sesame (*Sesamum indicum*). *Indian J. Agril. Sci.* 71(4): 271-272.
- Ali, M. H. 2001. Technical performance evaluation of Boyra Deep Tube-Well - A case study. *J. of the Institution of Engineers, Bangladesh*. Vol. 28/AE, No.1: 33 - 37
- Ali, M. H. 2001. Water use of wheat: A comparative study by 'CROPWAT' model. *Bangladesh J. of Agril. Sci.*, 28(1) : 125 – 130

- Ali, M. H. and M.S.U. Tulukder. 2001. Methods or approaches of Irrigation Scheduling – An overview. *J. of the Institution of Engineers, Bangladesh*, Vol. 28/AE, No.1: 11 – 23
- Ali, M.H. and H.N. Turrall. 2001. Determination of soil moisture at low tension by constant head technique. *Bangladesh J. Agri. Engg.* 12(1&2): 63-68
- Hassan, A. A. N. N. Karim and M. S. U. Talukder. 2000. Crop co-efficients of wheat under different irrigation regimes. *Bangladesh J. Agri. Engg.* 11 (1&2): 39-48.
- Hassan, A. A., A. A. Sarkar, N. N. Karim and M. H. Ali. 2000. Irrigation schedule and deficit irrigation for wheat cultivation. *Bangladesh J. Agriculture* 25(1&2): 35-40.
- Hassan, A. A., K Habib and M. S. U. Talukder. 2000. Assessment of sub-surface lithology and aquifer condition of Fulbaria Thana for groundwater development. *J. Institute of Engineers, Bangladesh*. 27/AE(1): 57-63.
- Hassan, A. A., M. H. Ali, N. N. Karim and A. A. Sarkar. 2000. Effect of irrigation on the yield-water relations of mustard. *Bangladesh J. Agriculture* 25 (1&2):51 - 61.
- Sarkar, A. A., A. A. Hassan, H. Ali and N. N. Karim. 2000. Yield potential of lentil under different soil moisture status. *J. of The Institution of Engineers, Bangladesh*. 27/AE(1):35-42.
- Sarkar, A. A., J. Diels and J. Feyen. 2000. Use of the TDR technique for soil moisture and salinity measurement: I. Laboratory calibration for performance evaluation. *J. of The Institution of Engineers, Bangladesh*.27/AE (1):95-104.
- Sarkar, M. A. A., M. Kunitake and F. Kondo. 2000. Site investigation on a superannuated earth dam for seepage flow studies. *Bangladesh J. Agril. Sci.* 27(1): 83-89.
- Sarkar, M. A. A., M. Kunitake, F. Kondo and Y. Yamamura. 2000. Seepage analysis by zoning a superannuated earth dam and using the 3-D finite element method. *NFORMATION, An International Journal, Faculty of Science, Yamaguchi University, Japan*. 3(3): 341-359.
- Ali, M.H. and H.N. Turrall. 2000. Behavior study of cracking clay soil. *I. Hydraulic and swelling properties*. *J. of the Institution of Engineers, Bangladesh*, Vol. 27/AE, No.1: 9 - 18
- Ali, M. H. and H.N. Turrall. 2000. Behavior study of cracking clay soil. *II. Simulation of water balance, cracking & subsidence*. *J. of the Institution of Engineers, Bangladesh*, Vol. 27/AE, No.1: 19 – 26
- Eusufzai, S. U. K., Hassan, A. A., Sarkar, A. A. and Karim, N. N. 2000. Effects of water logging on the yield components of sugarcane. *Bangladesh J. Sugarcane*, 22: 128-131.
- Hassan, A. A. and A. A. Sarkar. 1999. Water use and yield relations of chickpea as Influenced by different irrigation levels. *Thai J. Agric. Sci.* 32(3): 349-354.
- Hassan, A. A., S. U. K. Yusufzai and A. A. Sarkar. 1999. Response of sugarcane varieties to different levels of irrigation. *International J. Tropical Agric. (India)*17(1-4): 221-225.
- Islam, M. N., A.A. Hassan and K. K. Dey. 1999. Comparison of Infiltration Measurement Techniques in Border Irrigation. *Pak. J. Sci. Ind. Res.* 42(1): 34-38.
- Islam, M. N., Hassan, A. A. and K. K. Dey, 1999. Development of infiltration equation using field data from border irrigation system. *Bangladesh J. Agril. Sci.* 26(1): 133-140.

- Sarkar, A.A., M. Kunitake and F. Kondo. 1999. Application of the finite element method for seepage analysis through an earth dam. J. of The Institution of Engineers, Bangladesh. 26/AE(1): 28-36.
- Hassan, A. A. 1998. Lysimete study on pattern of water use by crops above controlled water tables. Thai J. Agric. Sci. 31(2): 265-274.
- Hassan, A. A. 1998. Sub-irrigation and shallow groundwater as a resource for crop water use; A Review. J. Institution of Engineers, Bangladesh. 25/AE(1): 1-10.
- Hassan, A. A. and N. N. Karim, 1998. Agrochemical use and extent of environmental contamination in Bangladesh; A Review. Bangladesh J. Agri. Engg. 9(1&2) 61-70.
- Sarkar, M. A. A., M Kunitake, Kondo F. and Y. Yamamura. 1998. Permeability estimation of seepage through an earth dam with consideration of zoning using 3-D FEM. International conference on agricultural engineering, Part 2, Oslo (Norway), 24-27 August, pp.848-849.
- Sarkar, M. A. A., M. Kunitake, F. Kondo and Y. Yamamura. 1998. Back-Analysis for permeability identification in a superannuated earth dam using 3-D FEM. Thai J. Agric. Sci. 31(3): 299-309.
- Hassan, A. A. and A. A. Sarkar. 1997. Pattern of upward soil water flux to meet evaporative demand of maize in deep water table. J.Agric.Res.(Pak) 35(1-2): 19-25.
- Islam, M. N., A. A. Hassan and K. K. Dey. 1997. Evaluation of border irrigation system at Bangladesh Agricultural University Farm. Bangladesh J. Agri. Engg. 8(1&2): 41-48.
- Ali, M. H., A. A. Hassan and M. S. U. Talukder. 1997. Irrigation schedules for wheat using lysimeter. *Bangladesh J. of Agril. Engg.*, 8(1 & 2) : 83-91.
- Dey, K. K., M. N. Islam and A. A. Hassan. 1996. Comparison of different infiltration equations using ring-infiltrometer data. Progress. Agric. 7(2): 39-
- Hassan, A. A., D. A. Rose land J. R. O' Callaghan. 1996. Model of soil moisture characteristics. Thai J. Agric. Sci. 349-356.
- Hassan, A.A. and A. A. Sarkar. 1996. Water reaquirement and irrigation schedule for tomao (*lycopersicon esculentum*) at different agro-ecological zones of Bangladesh. Bangladesh Hor. 24 (1&2): 81-85.
- Hassan, A. A. and A.A. Sarkar. 1996. Water management practices for two rice mutants in three AEZ of Bangladesh. Progress. Agriculture 7(1): 117-121.
- Hassan, A. A. and A. A. Sarkar., 1995. Installation of non-weighing lysimeters for evaluation of agricultural hydrology. J. The Institution of Engineers, Bangladesh. 23/AE(1): 15-20.
- Hassan, A. A., D. A. Rose and J. R. O'Callaghan. 1994. Comparison of drainage flux, soil water depletion and laboratory for determining unsaturated hydraulic conductivity of a soil. Bangladesh J. Sci. Res. 12(2): 173-179.
- Hassan, A. A. 1993. Water table contribution to crop water use. I. Influence of hydraulic gradient and plane of zero flux. J. The Institution of Engineers Bangladesh 21(3): 47-53.
- Hassan, A. A. and A. A. Sarkar. 1993. Yield and water use efficiency of newly developed rice mutant under different water management practices, IRRN (Philipines) 18(2): 34(June).

- Hassan, A. A. and J. R. O'Callaghan. 1992. Modeling water table contribution to crop water use. *Bangladesh J. Water Resour. Res.* 13: 41-51.
- Sarkar, A. A., M. Ahmed, A. F. M. S. Islam and M. R. Khan. 1992. Irrigation scheduling of groundnut based on pan evaporation. *Thai J. Agric. Sci.* 25: 47-53.
- Sarkar, A. A., M. Ahmed, A. F. M. S. Islam and M. R. Khan. 1992. Effect of surface drainage on the yield and yield components of groundnut. *Bangladesh J. Agril. Sci.* 19(1): 103-106.
- Hassan, A. A. and D. A. Rose. 1991. Water use by crops from shallow water tables. *Aspects of Applied Biology (UK)* 26(1991): 257-261.
- Sarkar, A. A., A. A. Hassan, M. U. Ahmed and M. A. Hamid 1991. Irrigation scheduling to wheat in the old Brahmaputra flood plain soil using open pan evaporation. *Thai J. Agric. Sci.* 24: 95-102.
- Sarkar, A. A., S. M. A. Ali, M. S. U. Talukder and M. Ahmed. 1991. Irrigation scheduling to mustard using open pan evaporation. *Pak. J. Sci. Ind. Res.* 34(5): 191-195 (Pakistan).
- Sarkar, A. A., M. Ahmed, M. S. U. Talukder and M. R. Khan. 1990. Yield and water use of mustard under different irrigation regimes. *Bangladesh J. Agril. Sci.* 17(2): 293-298.
- Hassan, A. A., A. A. Sarkar., M. I. Ali and G. Ahmed. 1989. Effect of Fertilizer and water management practices on rice production in the G.K. project area. *Nuclear Sci. and Applications* 1(1): 49-53.
- Hassan., A. A., A. A. Sarkar., and M. I. Ali. 1989. Leaching loss of some Macro and Micro-nutrients in rice field under different irrigation methods. *Nuclear Sci. and Applications* 1(2): 77-81.
- Sarkar, A. A., M. S. U. Talukder and M. Ahmed. 1989. Effect of water management practices on the growth and yield of rice. *Bangladesh J. Extension Education* 4(1&2): 71-77.
- Sarkar, A. A., and A. A. Hassan. 1988. Irrigation scheduling to mustard using open pan evaporation. *Thai J. Agric. Sci.* 21: 311-321.
- Hassan, A. A. and A. Rahman. 1987. Effects of various combinations of water supplies and nitrogen rates on growth and yield of mustard. *Thai J. Agric. Sci.* 20: 17-25.
- Hassan, A. A. and M. A. Rahman. 1987. Effect of soil moisture stress on lentil (*Lens culinaris*). *Thai J. Agric. Sci.* 20: 277-283.
- Sarkar, A. A., A. A. Hassan, M.I. Ali, M.C. Chanda, B. C. Basak and G. Ahmed. 1987. Effect of fertilizer and irrigation on the yield of wheat at the G.K. project area. *Bangladesh J. Nucl. Agric.* 3: 66-74.
- Hassan, A. A. 1986. Effect of flooding depth on yield and water requirement of rice. *Thai J. Agric. Sci.* 20: 155-160.
- Hassan, A. A., B. C. Basak. and M. A. Rahman. 1986. Irrigation scheduling of mustard using open pan evaporation in Grey Flood Plain soil. *Bangladesh J. Nuc. Agric.* 2: 1-5.
- Hassan, A. A. and A. Anukularmphai. 1985. Design parameters of mole drainage system in Bangkok soil. *AMA (Japan)* 16(1): 49-54.
- Hassan, A. A. and M. A. Hamid. 1985. Study of surface drainage effects on soil moisture distribution and growth and yield of summer grown groundnut using nuclear technique. *Bangladesh J. Nuc. Agric.* 1: 32-42.

Hassan, A. A. and A. Anukularmphai. 1984. Mole drainage behavior in Bangkok clay soil. *Thai J. Agric. Sci.* 17: 257-261.

Hassan, A. A., S. M. Rahman and S. S. Prihar. 1984. Water transmission characteristics and growth of maize as affected by depth of tillage. *AMA (Japan)* 15(4): 31-34.

1.2 Reports

Sarkar, A.A., M.H. Ali. 2010. Evaluation of Different Water Management Practices for Water Savings, Nitrate Leaching and Rice Yield. A Research Report, BINA/Ag.Engg.Division-8, Bangladesh Institute of Nuclear Agriculture, p.25.

Sarkar, A.A., M.H. Ali, M.A. Rahman. 2010. Long-term water-table dynamics of Rajshahi district and its prediction using MAKESENS model. A Research Report, BINA/Ag.Engg.Division-9, Bangladesh Institute of Nuclear Agriculture, p.22.

Sarkar, A.A., A.A. Hassan, M.H. Ali, N.N. Karim, M.A. Rahman, M. Hasanuzzaman. 2010. Arsenic: Its Presence in Groundwater, Uptake in Food Chain and Mitigation Measures. A Research Report, BINA/Ag.Engg.Division-10, Bangladesh Institute of Nuclear Agriculture, p.30.

Sarkar, A.A., A.A. Hassan, M.H. Ali. 2007. The Mega City Dhaka: I. Underground Water Table Conditionj – Long Term Trend Analysis and Future Prediction Using a Computer Model. A Research Report, Ag. Engineering Division, BINA/AgEngg Division – 6, August 2007.

Sarkar, A. A. and A. A. Hassan. 2007. An appraisal of groundwater status in Dinajpur district – analysis of water quality and long term water table data. A Report, Ag. Engineering Division. BINA/Ag.Engg. June, 2007.

Hassan, A. A., N.N.Karim, M.A. Hamid and M.A. Salam. 2001. Utilization of mutant /varieties in demonstration of a modified cropping pattern for drought prone areas of Bangladesh. IAEA TC Project Report, TC Project Period: 1999 – 2001.

Hamid M.A., A.A. Hassan and M.A. Salam.2000. Utilization of mutants/varieties in demonstration of a modified cropping pattern for drought prone areas of Bangladesh. Progress report. 1999-2000 on IAEA sponsored TC project BGD/5/021. BINA, Mymensingh.

Hassan, A. A. 1998. Pressurized irrigation technology in Germany and improvement options for irrigation system in Bangladesh. Institute of production Engineering, Federal Research Center of Agriculture, Braunschweig. Nr. 244/1998.

Hassan, A.A., A.A. Sarkar and A. Halim Sarder. 1995. Design and construction of non-weighing gravity type lysimeter for agro-hydrological studies. Lysimeter Report, Ag. Engineering Division, BINA/Ag. Engg. August.

Hassan, A. A. and A. A. Sarkar. 1994. Assessment of irrigation schedules of field crops using neutron moisture meter to increase effective use of water in irrigation projects. Research Report, IAEA research contract – RC/6985, BINA/Ag. Engg. August, 1994.

Hassan, A.A. 1986. Tensiometer: Application of measurements. Bangladesh Institute of Nuclear Agriculture. Report No. IWM-1-86.

1.3 Books / Book Chapters

(a) Books:

- (i) **Ali, M. H.** (2016). Principles and Practices of Water Resources Development and Management. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-63485-175-6
- (ii) **Ali, M. H.** (Editor) (2013). Irrigation Management, Technologies, and Environmental Impacts. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-62417-862-7
- (iii) **Ali, M. H.** (2013). Principles and Practices of Engineering and Industrial Economics. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-62417-596-1
- (iv) **Ali, M. H.** (2011). Practices of Irrigation & On-farm Water Management, Volume 2. Springer Science+Business Media. ISBN: 978-1-4419-7636-9
- (v) **Ali, M. H.** (2010). Fundamentals of Irrigation & On-farm Water Management, Volume 1. Springer Science+Business Media. ISBN: 978-1-4419-6334-5
- (vi) **Ali, M. H.** (2008). Deficit irrigation for wheat cultivation under limited water supply condition. Universal publisher, Boca Raton, Florida, USA, ISBN: 1599426862
- (vii) **Ali, M. H.** and M.G.M. Amin (2007). Krishi Abohawabiddaya (Agricultural Meteorology). Bangla Academy, Dhaka, Bangladesh, ISBN 984-07-4586-7

(b) Chapters in Books

- (i) **Ali, M. H.** and I. Abustan (2011). Methods and approaches of groundwater investigation, development, and management. *In: Dominic P. Torres (Edit.) Water Engineering*. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-61209-914-9, pp.1-122
- (ii) **Ali, M.H.** (2011). Water management in drought-prone areas. *In: Daniel M. Carrey (Edit.) Water Management*. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-61761-305-0, pp.41-66
- (iii) **Ali, M.H.** (2011). Water management in salt affected areas. *In: Daniel M. Carrey (Edit.) Water Management*. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-61761-305-0, pp. 67-82
- (iv) **Ali, M.H., M.S.U. Talukder and N. van Viet** (2010). Selection processes of (changes in) land use and cropping patterns. *In: Kees Stigter (Edit.) Applied Agrometeorology*, Springer Science+Business Media, ISBN: 978-3-540-74697-3, pp.309-314

- (v) **Ali, M.H.** (2010). Environmental and economic aspects of excessive groundwater withdrawal. In: Andrew C. Briggs (Edit.) Water Shortages: Environmental, Economic and Social Impacts. Nova Science Publishers, Inc, NY, USA, ISBN: 978-1-61728-309-3, pp. 177-194

1.4 Scientific Popular Articles

Ali, M.H. and M.A.Islam (2018). Wheat cultivation in coastal saline area of Bangladesh through irrigation management gypsum application. Krishi Kotha, Feb.3, 2018 (in Bangali).

Islam, M.A and M.H.Ali (2018). Conservation agriculture: New era for cultivation. Krishi Biplob, 15-29 March, 2018 (in Bangali)

Islam, M.A and M.H.Ali (2018). Irrigation management in Mungdall cutivation. AgriNews24.com. March 19, 2018.

Ali, M.H. (2017). Irrigation management for wheat in saline area. Leaflet, No.Agril.Engg./2017/11

Ali, M.H. and M.M. Islam (2017). Green super rice ‘Binadhan-17’ saves 25-35% irrigation water (in Bangali). *Daily Sangbad*, 01 Januarry, 2017

Ali, M. H. (2017). Estimation of groundwater recharge from rainfall in Mymensingh region. BANCID (Bangladesh National Committee of the International Commission on Irrigation and Drainage) Newsletter, Dec. 2017 issue.

Ali, M. H. (2017). Drought tolerance of Aus rice genotypes and irrigation water savings. *BANCID Newsletter*, Dec. 2017 issue.

Ali, M. H. and N.N. Karim (2017). Managed aquifer recharge: A viable option to tackle the water crisis in the coming days. *BANCID Newsletter*, Dec. 2017 issue.

Ali, M. H. (2016). Climate change/Raising-temperature may not always increase water demand in crop sector. BANCID (Bangladesh National Committee of the International Commission on Irrigation and Drainage) Newsletter, Dec. 2016 issue, pp.12-13

Ali, M. H. (2016). Low-cost raised-bed Lysimeter: A viable tool for salinity, drought and drainage research. BANCID Newsletter, Dec. 2016 issue, pp.27-29.

Ali, M.H. and M.M. Islam (2016). Green super rice ‘Binadhan-17’ saves 25-35% irrigation water. Daily Jugantor, 28 Dec., 2016

Ali, M. H. (2015). Adverse climatic condition and water resources management in Bangladesh. In: Use of farm machinery and efficient irrigation system management, Training Manual 2015. M.A. Hossain, N.N. Karim, M.I. Hossain, and S. Ahmed (Edit.), Bangladesh Agricultural Research Council, pp.48-57

Sarkar, A.A. and M.H. Ali. 2011. Water-table dynamics and its long-term trend at some regions of Bangladesh. *The Guardian*, 2011, p.39-42

Hassan, A. A. and J. Adu-Gyamfi. 2010. Efficient management of soil, crop and water in the coastal areas of Bangladesh for increased agriculture production. IAEA Soils Newsletter Vol. 32. No. 2, 29pp.

Ali, M. H. 2004. Cultivation of wheat instead of Boro rice to stop the declination of groundwater. *Krishi Biplob*, 31Oct.-14 Nov., 2004 (in Bangali)

Ali, M. H. 2004. Management of fertilizer and water in potato cultivation. *Krishi Biplob*, 15-29 Nov., 2004 (in Bangali)

Ali, M. H. 2004. Way to increase the seed of mustard. *Krishi Biplob*, 15-29 Nov., 2004 (in Bangali)

Ali, M. H. 2004. Importance of lentil cultivation and its modern cultivation procedure. *Krishi Biplob*, 31 Nov. – 14 Dec., 2004 (in Bangali)

Ali, M. H. 2004. Cultivation of tomato with modern technique. *Krishi Biplob*, 15 Nov. – 29 Dec., 2004 (in Bangali)

Ali, M. H. 2003. Fertilizer and irrigation management in Boro cultivation for sustainable agriculture and environment. *Krishi Biplob*, 13-27 Feb., 2003 (in Bangali)

Ali, M. H. 2003. Maximize your land-use: Choose appropriate crop type and variety based on your land-type, weather, and availability of water. *Krishi Biplob*, 1-16 Oct., 2003 (in Bangali)

Hassan, A. A. 2002. Installation of shallow tubewell for arsenic free drinking water. *BINASA Newsl*: 5(1): 2-3.

Hassan, A. A. 1996. Monitoring of groundwater management for environmental preservation. *BINASA Newsl*. 4(1): 4.

Hassan, A. A. 1995. Present trend of ground water irrigation - can it be sustained for long? *BINASA Newsl*. 3(1): 3.

Hassan, A. A. 1993. Resource management: Shallow groundwater as resource for crop water use. *The Bangladesh Observer*, 4 September, 1993.

1.5 Leaflets/Bulletins

- (i) Irrigation management for wheat cultivation in saline area. A Leaflet, No. Agril.Engg./2017/11. (in Bangali)
- (ii) Effectiveness of crop sequence “Binadhan-7 – Binamusur-5 – Binatil-2” in Magura district to combat climate change effects. (Dec., 2013) (in Bangali)
- (iii) Effectiveness of crop sequence “Binadhan-7 – Binamusur-5 – Binatil-2” in Magura district to combat climate change effects. (Dec., 2013) (in Bangali)
- (iv) Extension message: Crop (sunflower, maize and soybean) cultivation in southern saline high-lands with proper management of irrigation water. (2012) (in Bangali)
- (v) Increasing cropping intensity and crop production in Barind area of Chapai Nawabgonj district through water management. (Dec., 2011) (in Bangali)
- (vi) Precast ferrocement irrigation channel. (1998) (in Bangali)