#### **CURRICULUM VITAE**

#### 1. Name :Engr. Dr.Md. Hossain Ali (M.H. Ali)

#### 2. Affiliation:

Chief Scientific Officer

and Head,

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Web of Science Researcher ID: H-4048-2019. linkedin: https://www.linkedin.com/in/hossainali/

3. Service experience: 27 years (01yr in teaching, 01 yr in Mgt.& technical, 25yrs in research,)

4. Students supervised: 12 (MS)

**5. Publication summary**: Total 133

Book: 7
Book Chapters: 7
J. article International: 41
J. article national: 45
Proceedings paper: 3
Research report: 6
Scientific popular article 22
Leaflets 4

Total citations: 1783 (in Google Scholar, on 11 April, 2022)

*h*-index: 14 *i*-10 index: 22

### 6. Area of expertise:

- Irrigation management for field crops
- Deficit irrigation
- Groundwater dynamics
- Hydraulic properties of aquifer
- Water Resources management
- Agro-meteorology, Climate change

### 7. Area of interest:

- Solute transport in field crops
- Impact of climate change on different aspects of Water Resources
- Automation in irrigation management system



### 8. Scientific Recognition:

- (a) Achieved "Best Scientist Award 2016' from 'Bangladesh Institute of Nuclear Agriculture'.
- **(b)** Included in 29<sup>th</sup> & 30<sup>th</sup> edition (2012 & 2013 issue) of "Who's Who in the World" (Marquis Who's Who, NY,USA) for contribution in science in respective field [A certificate is given].
- (c) Included in "2000 outstanding Intellectuals of the 21st Century" ('International Biographical Centre, Great Britain') [A certificate is given].
- (d) Included in "Top 100 Engineers for 2012", by 'International Biographical Centre, Great Britain' [A certificate is given].
- (e) Included in "International Dictionary of Professionals, 2013 edition", by 'American Biographical Institute'.
- **9. Working experience with models/softwares**: AquaCrop, UPFLOW, BUDGET, HYDRUS, MAKESENS, CROPWAT, Rainbow, ET<sub>0</sub>, FLOCR, RETC, STAR.
- 10. Models/tools developed: SUNSHINE, CropET0, E-STAT, AmanGrow, AusGrow

#### 11. Personal information:

Date of birth : 31<sup>st</sup> December, 1966 Nationality : Bangladeshi (by birth)

Religion : Islam (Sunni)

Sex : Male Marital status : Married

### 12. Academic Degrees:

Degree obtained	University / Board	Department/ School/ Major field	Year/ Result published	Class/ Division
Post-doctorate	University Sains Malaysia (USM)	School of Civil Engineering (Water Management)	2011	By research
Ph.D	Bangladesh Agricultural University, Mymensingh, Bangladesh	Dept. of Irrigation & Water Management	2008	By research
M. Engg. Sci.	The University of Melbourne, Australia	Dept. of Civil & Environmental Engg. (Water Management)	2000	By research
M.Sc. (Agril.Engg.)	Bangladesh Agricultural University, Bangladesh	Dept. of Irrigation & Water Management	1997	Higher 2 <sup>nd</sup> Class
B.Sc.Agril.Engg.(H ons)	Bangladesh Agricultural University, Bangladesh	Major in: Irrigation & Water Management	1991	1 <sup>st</sup> Class (5 <sup>th</sup> position)
H.S.C. (Higher Secondary Certificate)	Dhaka Board	Science	1984	1 <sup>st</sup> Division (with distinction)
S.S.C. (Secondary School Certificate)	Dhaka Board	Science	1982	1 <sup>st</sup> Division (with distinction)

### 13. Publication details:

(a) **Books**: 07

- (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

  Hardcover: <a href="https://novapublishers.com/shop/principles-and-practices-of-water-resources-development-and-management/">https://novapublishers.com/shop/principles-and-practices-of-water-resources-development-and-management/</a>
- (ii) Ali, M. H. (Editor)(2013). Irrigation Management, Technologies, and Environmental Impacts. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-62417-862-7 <a href="http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=39065">http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=39065</a>
- (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 http://www.novapublishers.org/catalog/product\_info.php?products\_id=38740
- (iv) Ali, M. H. (2011). Practices of Irrigation & On-farm Water Management, Volume 2. Springer-Verlag, New York. ISBN: 978-1-4419-7636-9; p.546, <a href="https://link.springer.com/book/10.1007%2F978-1-4419-7637-6">https://link.springer.com/book/10.1007%2F978-1-4419-7637-6</a> (http://www.springer.com/environment/environmental+management/book/978-1-4419-7636-9)
- (v) Ali, M. H. (2010). Fundamentals of Irrigation & On-farm Water Management, Volume 1.Springer-Verlag, New York. ISBN: 978-1-4419-6334-5; p.560 <a href="https://link.springer.com/book/10.1007/978-1-4419-6335-2">https://link.springer.com/book/10.1007/978-1-4419-6335-2</a> (<a href="https://www.springer.com/environment/environmental+management/book/978-1-4419-6334-5">https://link.springer.com/book/10.1007/978-1-4419-6335-2</a> (<a href="https://www.springer.com/environmental+management/book/978-1-4419-6334-5">https://www.springer.com/environment/environmental+management/book/978-1-4419-6334-5</a>)
- (vi) Ali, M. H. (2008). Deficit irrigation for wheat cultivation under limited water supply condition. Universal publisher, Boca Raton, Florida, USA, ISBN: 1599426862 (http://www.universal-publishers.com/book.php?method=ISBN&book=1599426862)
- (vii) Ali, M. H. and M.G.M. Amin (2007). KrishiAbohawabiddaya (Agricultural Meteorology). BanglaAcademy, Dhaka, Bangladesh, ISBN 984-07-4586-7 (overview/about:<a href="http://www.agrometeorology.org/topics/books-in-agrometeorology/krishi-abohawabiddaya-agricultural-meteorology">http://www.agrometeorology.org/topics/books-in-agrometeorology/krishi-abohawabiddaya-agricultural-meteorology</a>)

### (b) Book Chapters: 07

- (i) Ali, M.H., M. A. Islam (2020). Recent Trend of Reference Evapotranspiration under Climate Change Perspective: A Case Study in the North-Eastern Region of Bangladesh. In: *Emerging Issues in Science and Technology Vol. 4* (Chapter 5), Book Publisher International, Print ISBN: 978-93-89816-54-9, eBook ISBN: 978-93-89816-55-6. <a href="http://bp.bookpi.org/index.php/bpi/catalog/book/184">http://bp.bookpi.org/index.php/bpi/catalog/book/184</a>; DOI: <a href="https://doi.org/10.9734/bpi/eist/v4">https://doi.org/10.9734/bpi/eist/v4</a>
- (ii) Ali, M. H.; M. A. Islam (2020). Application of Tracer Method in Determining Groundwater Recharge: A Case Study at Mymensingh Area, Bangladesh. In: *Research and Development in Agricultural Sciences Vol. 2* (Chapter 10). Book Publisher International, ISBN-13 (15)978-93-89816-22-8. <a href="http://bp.bookpi.org/index.php/bpi/catalog/book/132">http://bp.bookpi.org/index.php/bpi/catalog/book/132</a>; DOI: <a href="https://doi.org/10.9734/bpi/rdas/v2">https://doi.org/10.9734/bpi/rdas/v2</a>
- (iii) 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. Series: Water Resource Planning, Development and Management <a href="http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=17961">http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=17961</a>
- (iv) Ali, M.H. (2011). Water management in drought-prone areas. *In*: Daniel M. Carrey (Edit.) Water Recycling and Water Management. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-61761-305-0, pp.41-66 <a href="http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=13051">http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=13051</a>
- (v) Ali, M.H. (2011). Water management in salt affected areas. In: Daniel M. Carrey (Edit.) Water Recycling and Water Management. Nova Science Publishers, Inc, NY, USA. ISBN: 978-1-61761-305-0, pp. 67-82 <a href="http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=13051">http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=13051</a>
- (vi) 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 <a href="http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=12449">http://www.novapublishers.org/catalog/product\_info.php?cPath=23\_29&products\_id=12449</a>

(vii) 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

(http://www.springer.com/earth+sciences+and+geography/atmospheric+sciences/book/978-3-540-74697-3) [DOI: http://dx.doi.org/10.1007/978-3-540-74698-0\_8]

## (viii) Research articles

### **International J. papers: 43**

- 1. Ali, M. H., M. H. Zaman, M. A. Islam, P. Biswas, N. N. Karim and M. A. Kader (2021). Quality Assessment of Groundwater of Barind Area, Bangladesh using Integrated Hydrochemical Method. Asian Journal of Advances in Agricultural Research 16(4): 18-27. DOI: <a href="http://doi.org/10.9734/AJAAR/2021/v16i430181">http://doi.org/10.9734/AJAAR/2021/v16i430181</a>
- 2. Ali, M. H., M. H. Zaman, M. A. Islam, P. Biswas, N. N. Karim and M. A. Kader. (2021). Recent Trend of Precipitation and Crop Planning in Rajshahi Region of Bangladesh. Asian Journal of Advances in Agricultural Research 16(4): 28-39. DOI: <a href="http://doi.org/10.9734/AJAAR/2021/v16i430183">http://doi.org/10.9734/AJAAR/2021/v16i430183</a>
- Islam, A., M.H. Ali, P. Biswas (2020). Effect of Drought and Irrigation Management on Two Rice Mutants of Bangladesh. Asian Plant Research Journal 4(3): 39-45
   DOI: https://doi.org/10.9734/aprj/2020/v4i330089
- 4. **Ali, M. H.** (2020). Irrigation management for Binadhan-8 and Binadhan-10 Boro rice for optimum yield and water productivity under normal soil. *Sustainability, Agriculture, Food and Environmental Research*, 8(2):129-140. DOI: <a href="http://dx.doi.org/10.7770/safer-V0N0-art1831">http://dx.doi.org/10.7770/safer-V0N0-art1831</a>
- 5. **Ali, M.H.** (2019). Transplanting date adjustment in Boro rice cultivation as a strategy to reduce groundwater withdrawal in Bangladesh. Malaysian J. of Halal Res., 3(2): 1-8. DOI: <a href="https://doi.org/10.2478/mjhr-2019-0006">https://doi.org/10.2478/mjhr-2019-0006</a>
- 6. **Ali, M.H.** (2018). Drought Screening and Supplemental Irrigation Management for some Rice Cultivars in Drought Prone Area of Bangladesh. Int. J. of Applied Sci., 1(2):107-116. DOI: <a href="https://doi.org/10.30560/ijas.v1n2p107">https://doi.org/10.30560/ijas.v1n2p107</a>
- 7. **Ali, M. H.** (2017). Effect of different durations of water-logging at different growth stages on seed yield of sesame. Int. J. of Applied Sci., 1(2):68-76. DOI: https://doi.org/10.30560/ijas.v1n2p68
- 8. **Ali, M. H.** (2017). Groundwater quality of different locations of Bangladesh. *Sustainability, Agriculture, Food and Environmental Research*, 5(4): 1-21 DOI: <a href="http://dx.doi.org/10.7770/safer-V5N4-art1305">http://dx.doi.org/10.7770/safer-V5N4-art1305</a>
- 9. **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: <a href="http://doi.org/10.9734/AJEE/2017/36987">http://doi.org/10.9734/AJEE/2017/36987</a>
- 10. **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: http://doi.org/10.9734/ARJA/2017/36812
- 11. **Ali, M. H**. (2017). Quantifying natural groundwater recharge using tracer and other techniques. Asian Journal of Environment & Ecology, 5(1): 1-12, DOI: <a href="https://doi.org/10.9734/AJEE/2017/36811">https://doi.org/10.9734/AJEE/2017/36811</a>
- 12. **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 (http://www.sciencedomain.org/abstract/22083)
- 13. **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: http://doi.org/10.9734/AJAAR/2017/35860
- 14. **Ali, M. H.** (2017). Response of Chickpea Varieties to Different Irrigation Regimes. Asian Journal of Advances in Agricultural Research, 2(4): 1-7. DOI: http://doi.org/10.9734/AJAAR/2017/35861

- 15. **Ali, M. H.** (2017). Irrigation management for optimizing onion seed production. Asian Research Journal of Agriculture. 6(2): 1-6. DOI: http://doi.org/10.9734/ARJA/2017/35863
- 16. **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 (https://www.ijerm.com/vol/Volume-04-Issue-06)
- 17. 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 (<a href="https://www.cogentoa.com/article/10.1080/23311932.2017.1287619.pdf">https://www.cogentoa.com/article/10.1080/23311932.2017.1287619.pdf</a>)
- 18. **Ali, M. H.** and M. A. Rahman (2016). Design and construction of low-cost raised-bed drainage lysimeter for cropwater relations and hydrological studies. International Journal of Current Science and Technology, 4(3): 184-187 (<a href="http://journalijcst.com/issues/design-and-construction-low-cost-raised-bed-drainage-lysimeter-crop-water-relations-and">http://journalijcst.com/issues/design-and-construction-low-cost-raised-bed-drainage-lysimeter-crop-water-relations-and</a>)
- 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 <a href="http://www.ikpress.org/abstract/5802">http://www.ikpress.org/abstract/5802</a>
- 20. 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: <a href="http://dx.doi.org/10.9734/ajea/2016/23339">http://dx.doi.org/10.9734/ajea/2016/23339</a>
- 21. 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 (<a href="http://www.ajer.org/papers/v5%2802%29/D0502027034.pdf">http://www.ajer.org/papers/v5%2802%29/D0502027034.pdf</a>)
- 22. 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 (<a href="http://ggfjournals.com/content/papers/MIN-630">http://ggfjournals.com/content/papers/MIN-630</a>)
- 23. Mila, A. J., A. R. Akanda1, S. K. Biswas and **M. H. Ali** (2016). Crop Co-efficient Values of Sunflower for DifferentGrowth Stages by Lysimeter Study. British Journal of Environment & Climate Change, 6(1): 53-63 (<a href="http://sciencedomain.org/abstract/13918">http://sciencedomain.org/abstract/13918</a>)
- 24. 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 (<a href="http://www.asianacademicresearch.org/2015">http://www.asianacademicresearch.org/2015</a> abstract/november md 2015/25.pdf) (<a href="http://www.asianacademicresearch.org/novembermd2015">http://www.asianacademicresearch.org/novembermd2015</a>.html)
- 25. **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(http://garj.org/garjas/pdf/2014/August/Ali%20et%20al.pdf)
- 26. **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 (<a href="https://www.erpublication.org/IJETR/vol\_issue.php?abc1=25">https://www.erpublication.org/IJETR/vol\_issue.php?abc1=25</a>)
- 27. **Ali, M. H.**, I. Abustan (2014). A new novel index for evaluating model performance. J. of Natural Resour. and Dev., 04: 1-9 (<a href="http://jnrd.info/2014/01/a-new-novel-index-for-evaluating-model-performance/">http://jnrd.info/2014/01/a-new-novel-index-for-evaluating-model-performance/</a>)
- 28. **Ali, M. H.**, I. Abustan (2013). Irrigation management strategies for winter wheat using AquaCrop model. J. of Natural Resour. and Dev., 03: 106-113 (http://jnrd.info/2013/09/irrigation-management-strategies-for-winter-wheat-using-aquacrop-model/)
- 29. **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 (http://jnrd.info/2013/11/simulation-of-upward-flux-from-shallow-water-table-using-upflow-model/)

- 30. **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. DOI: http://dx.doi.org/10.14511/jasa.2012.010105
- 31. 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. DOI: <a href="http://doi.org/10.1007/s11269-011-9936-5">http://doi.org/10.1007/s11269-011-9936-5</a> (https://link.springer.com/article/10.1007/s11269-011-9936-5)
- 32. Sarkar, A.A., **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 (<a href="http://www.tandfonline.com/doi/full/10.1080/02508060903115183">http://www.tandfonline.com/doi/full/10.1080/02508060903115183</a>)
- 33. **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 (www.agrimetassociation.org/abstract/Abstract/20June...)
- 34. **Ali, M.H.** (2009). Irrigation yield response factor of winter wheat for different growth stages. *J.Agrometeorology*, 11(1): 9 14 (www.agrimetassociation.org/volume11n1.htm)
- 35. **Ali, M.H.** and M.S.U. Talukder (2008). Increasing water productivity in crop production A synthesis. *Agric. Water Manage*. 95: 1201 1213 (<a href="http://www.sciencedirect.com/science/article/pii/S0378377408001522">http://www.sciencedirect.com/science/article/pii/S0378377408001522</a>)
- 36. **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 (http://www.sciencedirect.com/science/article/pii/S0378377407001369)
- 37. **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. (<a href="http://www.agrimetassociation.org/volume9n1.htm">http://www.agrimetassociation.org/volume9n1.htm</a>)
- 38. **Ali, M.H.,** A.K.M.Adham, M.M. Rahman (2007). Impact of climate change on crop water demand and its implication on water resources planning. *J. Agrometeorol.*, 9(1): 20-25 (http://www.agrimetassociation.org/volume9n1.htm)
- 39. **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
- 40. 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
- 41. **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 <a href="http://epubs.icar.org.in/ejournal/index.php/IJAgS/article/view/2573/696">http://epubs.icar.org.in/ejournal/index.php/IJAgS/article/view/2573/696</a>
- 42. Sarkar, A. A., A. A. Hassan, **M. H. Ali** and N. N. Karim (2002). Effect of deficit irrigation at different growth stages on the yield of potato. *Pakistan J. of Bio. Sci*, 5(2): 128 134 (<a href="http://docsdrive.com/pdfs/ansinet/pjbs/2002/128-134.pdf">http://docsdrive.com/pdfs/ansinet/pjbs/2002/128-134.pdf</a>)
- 43. Hassan, A. A.; N. N. Karim; A. A. Sarkar and **M. H. Ali** (2001). Effect of water logging on the growth and yield of summer grown sesame (*Sesanumindicum*). *Ind. J. of Agril. Sci.*. 71(4): 271 272 (<a href="http://epubs.icar.org.in/ejournal/index.php/IJAgS/issue/view/1148">http://epubs.icar.org.in/ejournal/index.php/IJAgS/issue/view/1148</a>)

#### National J. papers: 45

44. **Ali, M.H.**; H. Zaman, A. Islam, P. Biswas (2019). Estimation of groundwater recharge using tracer and water balance method at Ishwardi, Bangladesh. J. of Agril. Engg., The Inst. Of Engrs, Bangladesh, 42/AE(1): 75-82. <a href="https://www.academia.edu/63607904/ESTIMATION">https://www.academia.edu/63607904/ESTIMATION</a> OF GROI NDWATER RECHARGE USING TRACER A ND WATER BALANCE METHOD AT ISHWARDI BANGLADESH

- 45. Zaman, H.; Ali, M.H.; X. Song (2019). The nature of groundwater dynamics under intensive dry-season Boro rice cultivation: A case study in Bogra district, northwest region of Bangladesh. J. of Agril. Engg., The Inst. Of Engrs., Bangladesh, 42/AE(1): 33-44
- 46. Zaman, H.; Ali, M.H.; A. Islam, P. Biswas (2019). Evaluation of groundwater quality of Chapainawabgonj, Bangladesh for drinking and agricultural use. J. of Agril. Engg., The Inst. Of Engrs., Bangladesh, 42/AE(1):61-67
- 47. **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 href="http://www.bina.gov.bd/publications/Vol-27\_28.pdf#page=64">http://www.bina.gov.bd/publications/Vol-27\_28.pdf#page=64</a>)
- 48. Sarkar, A.A., M.H. Zaman, M.A. Rahman, M.J.Nain, N.M.Karim, **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

  (http://www.bina.gov.bd/publications/Vol-27\_28.pdf#page=102)
- 49. SarkarA. A. and **M. H. Ali** (2012).Irrigation management for optimizing rice yield and nitrate leaching. Bangladesh J. Nuclear Agric. 23: 63-75
- 50. **Ali, M.H.**, H. Paul, M.R. Hoque (2011). Estimation of evapotranspiration using BUDGET model. *J. Bangladesh Agril. Uni.* 9(2): 257-266

  <a href="http://dx.doi.org/10.3329/jbau.v9i2.11038">http://dx.doi.org/10.3329/jbau.v9i2.11038</a>

  (www.banglajol.info/index.php/JBAU/article/view/11038)
- 51. **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
- 52. Sarkar, A. A., A.A. Hassan, **M. H. Ali,** M. H. Zaman and M. A.Rahman (2008). Long-term water-table fluctuation pattern and trend analysis in the old Brahmaputra flood plain aquifer. *J. of the Institution of Engineers, Bangladesh*, Vol. 34/AE, 13-24
- 53. **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
- 54. Hassan, A. A., M. H. Ali, and N.N. Karim (2006). Precast ferrocement channel sections as an alternative for channel lining in private sector irrigation of Bangladesh. *Bangladesh J. of Agril. Engg.*, 17(1 & 2): 19-30
- 55. 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
- 56. **Ali, M.H.** (2005).CropET<sub>0</sub>: a computer model to estimate reference evapotranspiration from climatic data. *Bangladesh J. of Agril. Engg.*, 16(1 & 2): 25 37
- 57. **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 *Bangladesh J. Env. Sci.*, 11(2): 290 295
- 58. **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
- 59. **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
- 60. **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
- 61. **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 (ET<sub>0</sub>) under Bangladesh condition. *Bangladesh J. Env. Sci.*, 11(1): 22 24
- 62. **Ali, M.H.** (2005). E-STAT: a computer program to perform statistical analysis of experimental data. *J. Bangladesh Agril. Univ.* 3(1): 133 138
- 63. **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
- 64. 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

- 65. **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
- 66. **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
- 67. **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
- 68. **Ali, M. H.**, M.R. Hoque, A. A. Hassan and M.A. Khair (2004). Photo-thermal unit requirement of wheat under different levels of irrigation. *J. Bangladesh Agril. Univ.* 2(2): 351-360
- 69. A.K.M. Adham, 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
- 70. 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
- 71. A.K.M.R. Islam, **M. H. Ali** and M.G.M. Amin (2004). Long-term variability of rainfall at different agroecological regions of Bangladesh. *J. Bangladesh Soc. Agril. Sci. Technol.* 1(1&2): 19 24
- 72. 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
- 73. Hassan, A. A., **M.H. Ali**, S.H. Bhuiya and M.S. Ullah (2003). Design and construction of water level indicator for geo-hydrologic studies. *Bangladesh J. of Agri. Engg.* 14 (1&2): 1-7
- 74. 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*, Vol. 30/AE, No.1, 51 60
- 75. Sarkar, A. A., A.A. Hassan, N. N. Karim, **M. H. Ali** and (2003). 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*, Vol. 31/AE, No.1, 65 74
- 76. **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
- 77. 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, Bangladesh*, Vol. 29/AE, No.1: 93 100
- 78. 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. of Agril. Sci.*, 29(1): 95-100
- 79. **Ali, M. H.** (2001). Water use of wheat: A comparative study by 'CROPWAT' model. *Bangladesh J. of Agril. Sci.*, 28(1): 125 130
- 80. **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
- 81. **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
- 82. **Ali, M.H.** and H.N. Turral (2001). Determination of soil moisture at low tension by constant head technique. *Bangladesh J. Agri. Engg.* 12(1&2): 63-68
- 83. **Ali, M. H.** and H.N. Turral (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
- 84. **Ali, M. H.** and H.N. Turral (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
- 85. 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. of Agri.* 25(1&2): 51 61
- 86. Hassan, A. A.; A. A. Sarkar, N. N. Karim and **M. H. Ali** (2000). Irrigation schedule and deficit irrigation for wheat cultivation. *Bangladesh J. of Agric*. 25(1&2): 43 50
- 87. Sarkar, A. A., A.A. Hassan, **M. H. Ali** and N. N. Karim (2000). Yield potential of lentil under different soil moisture status. *J. of the Institution of Engineers, Bangladesh*, 27(1): 35 42
- 88. **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.

#### **Proceedings paper:** 3

- 89. Sarkar, A.A., A.A. Hassan, **M. H. Ali,** M. H. Zaman and M. A. Rahman (2008). Long-term watertable fluctuation pattern and trend analysis in the old Brahmaputra flood plain aquifer. In: *Proc. Paper Meet 2008, The Inst. of Engrs., Bangladesh*, 37-48
- 90. 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. In: *Proc. Paper Meet 2008, The Inst. of Engrs., Bangladesh*, p.15-26
- 91. **Ali, M. H.** (2017). Drought tolerance of Aus rice genotypes and irrigation water savings. *Presented as Poster Paper in "2nd International Conference on Conservation Agriculture for Small Holders (CASH-II), 14-16 February, 2017, BAU campus, Mymensingh-2202, Bangladesh".*

#### Research Reports: 6

- 92. **Ali, M.H.**, M. Hassanuzzaman, P. Biswas (2021). Groundwater resources management for sustainable crop production in northwest hydrological region of Bangladesh (BINA Component). Project Completion Report, p.125
- 93. **Ali, M.** H. and M. A. Rahman (2016). Design and construction of raised-bed drainage Lysimeter for crop-water relations and hydrological studies. BINA/Agri.Engg.Division/11, p.8
- 94. 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
- 95. 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
- 96. 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
- 97. Sarkar, A.A., A.A. Hassan, **M. H. Ali** (2007). 'The mega city Dhaka: Underground water-table condition long term trend analysis and future prediction using a computer model'. A research report, BINA/Ag. Engg. Division-6, p.18

#### Leaflets: 4

- 98. Ali, M.H., P. Biswas (2022). Drainage management for sesame. A leaflet, Agril.Engg./2022/15. (in Bangali)
- 99. Ali, M.H., M. Hassanuzzaman, P. Biswas (2021). Water saving and economic cropping pattern for sustainable groundwater resource management in Nachol Upazila. A leaflet, Agril.Engg./2021/14. (in Bangali)
- 100. Ali, M.H., M. Hassanuzzaman, P. Biswas (2020). Water saving and economic cropping pattern for sustainable groundwater resource management in Niamatpur Upazila. A leaflet, Agril.Engg./2020/13. (in Bangali)
- 101. Ali, M.H. (2017). Irrigation management for wheat cultivation in saline area. A Leaflet, No. Agril.Engg./2017/11. (in Bangali)

### **Scientific Popular Articles / Other articles:**

- 102. **Ali, M.H.** (2020). Climate change: issues, implications and mitigation measures. The Reflector, Vol. 09, Issue 02, Dec. 16-31, p.58-59
- 103. **Ali, M.H.** (2020). Research program and future research plan of Agril Engg. Division, BINA. The Reflector, Vol. 09, Issue 02, Dec. 16-31, p.53-57

- 104. **Ali, M.H.** and P. Biswas (2019). Fertilizer and irrigation management to increase sesame production. AgriNews24, Feb.2019. (in Bengali)
- 105. **Ali, M.H.** and M.A.Islam (2018). Wheat cultivation in coastal saline area of Bangladesh through irrigation management and gypsum application. Krishi Kotha, Feb.3, 2018 (in Bangali).
- 106. 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.
- 108. **Ali, M. H.** and N.N. Karim (2017). Managed aquifer recharge: A viable option to tackle the water crisis in the coming days. BANCID (Bangladesh National Committee of the International Commission on Irrigation and Drainage) Newsletter, pp.10-11
- 109. **Ali, M. H.** (2017). Estimation of groundwater recharge from rainfall in Mymensingh region. BANCID Newsletter, pp.17-19
- 110. **Ali, M. H.** (2017). Drought tolerance of Aus rice genotypes and irrigation water savings. BANCID Newsletter, pp. 15-16
- 111. **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 (in Bangali).
- 112. **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
- 113. **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.
- 114. **Ali, M.H.** and M.M. Islam (2016). Green super rice 'Binadhan-17' saves 25-35% irrigation water. Daily Jugantor, 28 Dec., 2016
- 115. **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
- 116. 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
- 117. **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).
- 118. **Ali, M.** H. 2004. Management of fertilizer and water in potato cultivation. Krishi Biplob, 15-29 Nov., 2004 (in Bangali).
- 119. Ali, M. H. 2004. Way to increase the seed of mustard. Krishi Biplob, 15-29 Nov., 2004 (in Bangali).
- 120. **Ali, M. H**. 2004. Importance of lentil cultivation and its modern cultivation procedure. Krishi Biplob, 31 Nov. 14 Dec., 2004 (in Bangali).
- 121. Ali, M. H. 2004. Cultivation of tomato with modern technique. Krishi Biplob, 15 Nov. 29 Dec., 2004 (in Bangali).
- 122. Ali, M. H. 2003. Fertilizer and irrigation management in Boro cultivation for sustainable agriculture and environment. Krishi Biplob, 13-27 Feb., 2003 (in Bangali).
- 123. **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).

### 14. Details of service experience:

Title of the post	Organization	Type of work	Year of service
Assistant General Manager	Bangladesh Rural	Technical and	3.3.1993 - 17.5.1994

	Electrification Board	administrative	(01 Yr)
Scientific Officer	Bangladesh Institute of Nuclear Agriculture	Research	1.6.1994 - 9.7.2001 ( 7 Yrs)
Senior Scientific Officer	Bangladesh Institute of Nuclear Agriculture	Research	10.7.2001- 10.8.2011 (10Yrs)
Visiting Senior Lecturer	University Malaysia Pahang (Faculty of Civil Engg. & Earth Resources)	Teaching and Research	11.8.2011 – 10.8.2012 (01 Yr)
Senior Scientific Officer	Bangladesh Institute of Nuclear Agriculture	Research	11.8.2012 – 10.8.2013
Senior Scientific Officer and Head, Agril. Engg.Division	Bangladesh Institute of Nuclear Agriculture	Research	11.8.2013 – 03.8.2015
Principal Scientific Officer, and Head, Agril. Engg. Division &	Bangladesh Institute of Nuclear Agriculture	Research and Administration	03.8.2015 – 31-12- 2016
Guest lecturer (Part Time)	Interdisciplinary Centre for Food Security, Bangladesh Agricultural University, Mymensingh, Bangladesh	Teaching	2015 –2016
Principal Scientific Officer, and Head, Agril. Engg. Division	Bangladesh Institute of Nuclear Agriculture	Research and Administration	1.1.2017 – 23.5.2019
Chief Scientific Officer, and Head, Agril. Engg. Division	Bangladesh Institute of Nuclear Agriculture	Research and Administration	24.5.2019 – to date

# 15. Details of Teaching experience

## (a) At 'University Malaysia Pahang (UMP)', Full time

Year /	Level	Subject	Section/Group	No. of	Contact	Credit
Semester				students	hour per	point
					week	
2011-2012	Graduate	Engineering	1	69	2	2
Semester – 1		Economics				
	Graduate	Engineering	2	92	2	2
		Economics				
2011-2012	Graduate	Engineering	1	61	2	2
Semester – 2		Economics				
	Graduate	Environmental	1	7 per group	1.5	1
		Engg. Lab.				
	Diploma	Environmental	1	7 per group	1.5	1
		Engg. Lab.				

# (b) At 'Bangladesh Agricultural University' (BAU), Part-time

Year	Level /Group	Subject	No. of students	Contact hour per week	Credit point
2015	MS in Food	Watershed	33	2	2

	Security	Management and			
		Aquatic Biodiversity			
	MS in Sustainable	Integrated Watershed	08	2	2
	agriculture	Management and			
		Aquatic Conservation			
2016	MS in Food	Watershed	20	2	2
	Security	Management and			
		Aquatic Biodiversity			
	MS in Sustainable	Integrated Watershed	11	2	2
	agriculture	Management and			
		Aquatic Conservation			

## (c) Course development

	Title of the course	Level	Dept. & Institute		
1	Engineering Economics	Graduate (B.Sc. Engg.)	Faculty of Civil Engg. & Earth Resources,		
			University Malaysia Pahang		

## (d) **Postgraduate students supervised:**

# (a) With 'Department of Irrigation & Water Management', Bangladesh Agricultural University

Sl	Student name	Year	level	Thesis title		
1	Md	2006	MS	Modelling of actual evapotranspiration of wheat under soil		
	MizanurRahman			moisture stress		
2	Sharmin Islam	2009	MS	Assessment of upward flux from shallow water-table using a		
				simulation model		
3	Haimonti Paul	2009	MS	Studies on field-water balance using a simulation model		
4	Tanki Ashraf	2015	MS	Trend of groundwater level in three Upazilas of Rajshahi district		
5	Sadia Mubarak	2015	MS	Comparative assessment of water savings in Boro rice		
6	Mominul Haque	2015	MS	Response of sesame mutants to water-logging at different growth		
				stages		
7	Abdullah AL	2015	MS	Irrigation management and gypsum amendment for wheat		
	Mamun			cultivation in saline soil		
8	Debasis Basak	2018	MS	Evaluation of some rice mutants/cultivars for drought tolerance		
9	Mehedi Hasan	2020	MS	Irrigation management and amendment application in rice		
	Palash			cultivation in saline area		
10	Ashiny Chandra	2020	MS	Yield and water productivity of sunflower under different irrigation		
	Pal			regimes		
11	Jinat Sharmin	2021	MS	Measurement of Water Flux in Aman and Boro Rice field by		
				Experimental and Modeling Approach		
12	Mainul Islam	2021	MS	Performance of Binadhan-24 under different soil-moisture stress levels		

## (b) At 'School of Civil Engg., University Sains Malaysia' (2010-11):

Sl	Student's name	Level	Research title
no.			

1	Mrs Hanim	MS	Assessment of integrated water delivery system using SWMM at the Kerian irrigation Scheme.
2	M. Rashed	PhD	Study of the behavior of infiltration effect on run-off with permeable pavement.

## 16. Worked as a reviewer

(a) Reviewer of Scientific Journals

Sl no.	iewer of Scientific Journals  Journal
1	Scientific Reports (Nature)
2	Int. J. of Climatology
3	Water Resources Management
4	Transactions of the American Society of Agricultural and Biological Engineers
5	Agricultural Water Management
6	Plant Science
7	Agronomy Journal
8	The J. of Agril. Sci., Cambridge
9	Journal of Natural Resources and Development
10	American Journal of Experimental Agriculture
11	International J. of Plant and Soil Sci.
12	International Journal of Agricultural Policy and Research
13	Annual Research & Review in Biology
14	African J. of Agricultural Research
15	International J. of BioResearch
16	The Philippine Agricultural Scientists
17	African J. of Food Science
18	J. of Geography and Regional Planning
19	African Journal of Biotechnology
20	J. of Agricultural Science and Technology (Iran)
21	J. of Biology and Nature
22	J. of Bangladesh Soc. Agril. Sci. Technol.
23	Sky J. of Agricultural Research
24	Journal of Geology & Geosciences
25	Journal of Civil & Environmental Engineering
26	International Journal of Physical Sciences
27	Bangladesh J. of Nuclear Agriculture
28	International Journal of Ecology and Ecosolution (IJEE)
29	Journal of Geology & Geophysics
30	Biological Sciences
31	Asian Journal of Agricultural Extension, Economics & Sociology
32	African Journal of Engineering Research

## (b) Book reviewed

Sl	Title	Publisher	Year
1	Irrigation and Drainage Engineering	Springer	2013

# 17. Professional training received:

## (a) Local

Sl.	Title of the training	Organization	Duration	
No.		_		
1	Nuclear Agriculture	Bangladesh Institute of Nuclear	31 days	
		Agriculture, Mymensingh, Bangladesh	(1.8.1995 - 1.8.1995)	
2	Data Management	Graduate Training Institute, BAU,	13 days	
		Bangladesh	(23.10.1999-4.11.1999)	
3	Foundation Course for NARS	BangladeshAcademy for Rural	106 days	
	Scientists	Development, Comilla, Bangladesh	(15.4.2001 -29.7.2001)	
4	Use of Fertilizer	Bangladesh Agricultural Research	03 days	
	Recommendation Guide -2005	Council, Bangladesh	(9.2.2009-11.2.2009)	
5	Use of Manual for Fertilizer	Bangladesh Agricultural Research	05 days	
	Analysis	Council, Bangladesh	(15.6.2009- 8.6.2009)	
6	Human Resource Development,	Bangladesh Institute of Nuclear	01 day	
	transparency, accountability and	Agriculture, Mymensingh,	(29.06.2009)	
	establishment of good	Bangladesh	(29.00.2009)	
	governance			
7	Project Development and	BARC, Dhaka, Bangladesh	5 days	
	management		20.4.2014 - 24.4.2014	
8	Getting started with open source	BARC, Dhaka, Bangladesh	5 days	
	Geographical Information		12.10.2014 – 16.10.2014	
	System			
9	Financial and Procurement	BARC, Dhaka, Bangladesh	6 days	
	Management	_	7.4.18 - 12.4.18	
10				
11				
12				

# (b) Foreign

Sl.	Title of the training	Organization	Duration
No.			
1	M. Engg. Sci.	The Uni. of Melbourne, Australia	2 yrs (July, 1997 – June, 1999)
2	Post-doctorate	University Sains Malaysia (USM)	01 year (2010-11)
3	WASP7 Training Workshop	University Sains Malaysia (USM)	02 days (16 & 20 Dec., 2010)
4	Nuclear Techniques in Agricultural Research	CAAS-IEDA, Beijing, China	12 days (6.5.2013- 17.5.2013)
5	Quantifying natural groundwater recharge using tracer and environmental isotopes	School of Civil Engg., University Sains Malaysia	6 months (01.10.2013 -30.3.2014)
6	Integrated good agricultural practices / technology packages based on innovative soil, water and nutrient management	(1). International Rice Research Institute (IRRI), Los Banos, Philippines  (2). Philippine Nuclear Research Institute(PNRI),Manila, Philippines	10 days (11-4-2016 – 20-4-2016)
7	Mid-term review Meeting of IAEA Project: "Supporting Climate-proofing rice production systems based on Nuclear applications- Phase II'	Agency Nuclear Malaysia, Malaysia	7 days (5.2.2017 - 11.2.2017)
8			

## 18. Worked as a trainer

Sl. No.	Title of the training	Target group	Place	Duration /Date
1	Irrigation management for pulses and oilseeds	Block supervisors and farmers	BINA sub-station Ishurdi	01 day (Jan, 2000)
2	Irrigation management for pulses and oilseeds	Block supervisors and farmers	BINA sub-station Magura	01 day (Jan, 2000)
3	Irrigation management of BINA developed varieties	Deputy Director s(DAE) and Agriculture Officers	BINA sub-station Ishurdi	01 (Feb, 2007)
4	Irrigation method for BINA developed rice, oilseed and pulses	Sub-assistant Agricultural Officers and farmers	BINA sub-station Satkhira	01 day (15 Jan. 2009)
5	Climate change perspectives and sustainable & profitable crop cultivation with limited irrigation water	Agriculture Officer	BINA Head- quarter, Mymensingh	01 day (28 June, 2013)
6	Climate change perspectives and sustainable & profitable crop cultivation with limited irrigation water	Reporters and Journalists	BINA Head- quarter, Mymensingh	01 day (8 Sept., 2013)
7	Adverse climatic condition and water resources management in Bangladesh	Scientific Officer, Senior Scientific Officer, Assistant Professor	BARI, Gazipur	01 day (27 April. 2015)
8	Water management in Binadhan-14	Bangladesh Radio talk	Radio Bangladesh, Dhaka	01 day (5 May. 2015)
9	Adverse climatic condition and Water Resources Management in Bangladesh	SO, SSO, Assistant Prof.	BARC	2 hr (10-4-2016)
10	Carbon Isotope Discrimination (CID) for screening high WUE crop genotypes	Scientific Officer, Senior Scientific Officer	Organized by BINA.BINA	01 hr (on 29 May, 2016)
11	Nuclear Techniques in Irrigation Scheduling_ <i>I</i> . Basics and Perspectives	Scientific Officer, Senior Scientific Officer	BINA	1 hr
12	Nuclear Techniques in Irrigation Scheduling_ <i>II</i> . Applications	Scientific Officer, Senior Scientific Officer	BINA	1 hr
13	Use of Isotopic and Tracer Techniques in Hydrology and Water Resources Studies	Scientific Officer, Senior Scientific Officer	BINA	1 hr
14	Crop production under adverse climatic conditions	Scientific Officer, Senior Scientific Officer	BINA Head- quarter, Mymensingh	01 hr (24 July, 2017)
15	horti./dae			
16				
17				

# 19. Membership of professional societies/bodies:

Sl no.	Organisation/Association/ Professional Bodies	Membership Type	Role	Membership Level	Start Date	Organisation Status	Membership Status
1	The Institution of Engineers, Bangladesh	Life Fellow (F-10705)	Fellow	National	1996	Professional body (Acreediated by Govt.)	Active
2	Association of Agro- meteorologists	Life Member (LM-312)	General member	International	2007	Professional Association	Active
3	Bangladesh Association for the Advancement of Science (BAAS)	Life Member [LM-784(vii)]	General member	National	1995	Professional Association	Active
4	Progressive Agriculturists	Life Member	General member	National	1996	Professional Association	Active
5	International Society of Agricultural Meteorologists (INSAM)	Member	General member	International	2006	Professional Association	Active
6	Asia Pacific Water Forum	Member	General member	International	2010	Professional Association	Active
7	Water Environment Forum	Member	General member	International	2010	Professional Association	Active
8	Bangladesh Society of Agricultural Engineers (BSAE)	Member	General member	National	2005	Professional Association	Active
9	Bangladesh Association of Environmental Development (BAED)	Member	General member	National	2005	Professional Association	Active
10	Krishibid Institution	Member	General member	National	1997	Professional body (Acreediated by Govt.)	Active

# 20. Research project executed/supervised/developed:

# a) Foreign project

Sl. No.	Title of the project	Period	Funded by	Area /location
1	Assessment of irrigation schedules of field crops using neutron moisture to increase effective use of water in irrigation projects	1994 - 1995	IAEA	Mymensingh, Ishurdi, Rangpur (Bangladesh)
2	Landscape Salinity and Water Management in Coastal Region of Bangladesh for Improving Agricultural Productivity (FAO-IAEA/CRP/BGD-17732)	2014-15 – 2017-18	IAEA	Satkhira
3	Evaluating crop varieties/mutants in saline, submergence and drought prone areas and measuring the sustained management practices( <i>IAEA TC project No. BGD 5029</i> )	2015 -2019	IAEA	Mymensingh, Chapainawabgonj, Rajshahi
4	Mutation breeding for drought tolerance in rice for food security (IAEA CRP project No. RC 22311)	2017-2021	IAEA	Mymensingh, Chapainawabgonj, Rajshahi

# b) National project

Sl. No.	Title of the project	Period	Funded by	Area /location
1	Water requirement and irrigation scheduling of different crops	June, 1994 – June, 1997	BINA (GOB)	BINA Head-quarter &sub-station areas

		T	T = :	T = ==
2	Studies on rainfall, water-table fluctuation and groundwater withdrawal pattern to assess the groundwater availability for irrigation in dry season and characterizing aquifer characteristics	June, 1994 – June, 1997	BINA (GOB)	BINA sub-station areas and other areas
3	Water-table data monitoring for assessing	June, 1994 –	BINA	Mymensingh, Dhaka,
3	aquifer exploitation due to irrigation during dry season	June, 1997	(GOB)	greater Rajshahi, Pabna
4	Studies on the ground-water quality and monitoring of its pollution for suitability	June, 1994 – June, 1997	BINA (GOB)	Mymensingh, Ishurdi, Rangpur, Magora, Comilla, Satkhira
5	Studies on the surface and groundwater quality and monitoring its pollution for suitability assessment	July, 1999 – June, 2003	BINA (GOB)	BINA Head-quarter & its sub-station areas
6	Water requirement and irrigation scheduling of different crops	July, 1999 – June, 2003	BINA (GOB)	BINA sub-station areas
7	Development of appropriate management practices at saline area for increasing crop productivity	July, 1999 – June, 2003	BINA (GOB)	Satkhira
8	Studies on the groundwater movement and monitoring of pollution for sustaining groundwater quality	July, 1999 – June, 2003	BINA (GOB)	BINA sub-station areas and other areas
9	Studies on the impact of irrigation with arsenic contaminated water on soil and crop production and its improvement through soil-crop-water management practices	2001-2002	BINA (GOB)	Mymensingh
10	Deficit irrigation practices for optimizing water use in wheat (PhD research work, under BINA research program)	2002-2006	BINA (GOB)	Ishurdi
11	Water requirement and irrigation scheduling of different crops in different cropping system	July, 2006 – June, 2010	BINA (GOB)	BINA sub-station areas and other areas
12	Studies on the impact of climate change on field crops	July, 2006 – June, 2009	BINA (GOB)	Mymensingh, Ishurdi, Magura, Comilla
13	Studies on the arsenic problem in irrigation water for sustainable agriculture	June, 2008 – June, 2010	BINA (GOB)	BINA sub-station areas and other areas
14	Studies on groundwater dynamics for sustainable resource use	June, 2008 – June, 2010	BINA (GOB)	Greater Rajshahi and Pabna district
15	Studies on the surface and groundwater quality and pollution for suitability assessment	June, 2008 – June, 2010	BINA (GOB)	BINA sub-station areas and other areas
16	Studies on the soil hydraulic properties of different AEZ of Bangladesh	June, 2008 – June, 2010	BINA (GOB)	Mymensingh, Ishurdi
17	Development of appropriate water management practices for increasing crop productivity in saline area through rainwater harvesting and other management practices	June, 2008 – June, 2010	BINA (GOB)	Satkhira
18	Irrigation scheduling of different crops in different cropping systems	2013-14	BINA (GOB)	BINA Sub-stations
19	Studies on groundwater for its sustainable use in irrigation	2013-14	BINA (GOB)	BINA HQ and its substations
20	Development of appropriate water management practices for increasing crop water productivity in saline area	2013-14, 2014-15	CCTF, SRSD (GOB)	Satkhira

21	Irrigation management for Pulse and Oilseed lines and mutants using nuclear technique	2014-15	BINA (GOB)	BINA Sub-station Magura, Comilla
22	Water management for Cereals	2014-15	BINA (GOB)	BINA Sub-stations, Rajsgahi
23	Studies on groundwater recharge for sustainable use of groundwater using tracer and other advanced techniques (Mymensinh area)	2014-15 – 2016-17	BINA (GOB)	BINA HQ, Mymensingh
24	Studies on surface and groundwater quality under climate change perspectives	2014-15 – 2016-17	BINA (GOB)	BINA HQ, Mymensingh
25	Development of appropriate water management practices for increasing crop water productivity in saline area	2014-15 – 2016-17	BINA (GOB)	BINA Sub-station, Satkhira
26	Water management for Cereals	2014-15 – 2016-17	BINA (GOB)	BINA HQ, Rajshahi
27	Irrigation management for Pulse and Oilseed lines and mutants using nuclear technique	2015-16 – 2016-17	BINA (GOB)	BINA HQ
28	Studies on groundwater recharge at Ishwardi Area, using tracer and other advance tech.	2017-18	BINA (GOB)	BINA Sub-station, Ishwardi
29	Drainage management for sesame	2017-18	BINA (GOB)	BINA HQ, Mymensingh
30	Drought Screening and Irrigation Management for Field crops	2017-18	BINA (GOB)	Rajshahi Region
31	Studies on groundwater quality for safe use in irrigation and drinking purpose in ChapaiNawabgonj District	2017-18	BINA (GOB)	ChapaiNawabgonj District
32	Studies on climate change for sustainable agriculture	2017-18	BINA (GOB)	Barind area (Greater Rajshahi Region
33	Studies on Groundwater Dynamics and water-efficient cropping pattern in Barind area (Greater Rajshahi Region) for Sustainable WM	2017-18 – 2019-20	BINA (GOB)	Barind area (Greater Rajshahi Region



Dr. M. H. Ali