CURRICULUM VITAE

1. Basic Information

Dr. Md. Anwar Hossen
Principal Scientific Officer
Farm Machinery and Postharvest Technology Division
Bangladesh Rice Research Institute (BRRI), Gazipur-1701, Bangladesh
Phone no.: 02-9257401-5 ext 414 (office) and 247 (residence)
Cell no. +88-01712675130
E-mail: dranwarhossen75@gmail.com

2. Personal details

Nationality: Bangladeshi
Marital status: Married

3. Education

1. **PhD on farm mechanization**
   Bangladesh Agricultural University (BAU), Mymensingh
   Duration: January 2014 to January 2017
2. **Master of Science in Farm Power and Machinery (Ag. Engg.)**
   Bangladesh Agricultural University (BAU), Mymensingh
   Duration: July 2000 to December 2001
   Result: First Class (Grade A)
3. **Bachelor of Science in Agricultural Engineering**
   Bangladesh Agricultural University (BAU), Mymensingh
   Admission session: 1992-93, Passed in 1996 (Exam. held in 2000)
   Result: First Class and stood 4th position.
4. **Higher Secondary Certificate (Science group)**
   Netrakona Government College, Netrakona under Dhaka Board
   Duration: From 1990 to 1992, Passed in 1992
   Result: First Division.

4. Award received-3

1. Director General's Award from the Director General of Bangladesh Academy for Rural Development for achieving first position in the13th foundation training Course for NARS Scientists sponsored by BARC and organized by BARD, Comilla from January 15 to May 14, 2006.
2. Award in recognition of outstanding research contribution for "Research and Development on Unpuddled Rice Transplanter" in the CASH-II international conference at Bangladesh Rice Research Institute from 14 to 19 February, 2017.
3. Awarded for Shahnaj Parveen Gender Research Award (in honour of Late Prof. Dr. Shahnaj Parveen) under the research project entitled "Poverty squares and gender circles: unravelling agriculture gaps, challenges and opportunities in the Eastern Gangetic Plains" for the best PhD thesis in 2016 in Bangladesh Agricultural University.

5. Employment record

1. **Principal Scientific Officer**
   Farm Machinery and Postharvest Technology Division of BRRI
   Duration: From 26 December, 2022 to date
2. **Senior Scientific Officer**
   Farm Machinery and Postharvest Technology Division of BRRI
   Duration: From 12 January, 2011 to 25 December, 2022
3. **Scientific Officer**

Farm Machinery and Postharvest Technology Division of BRRI
From 20 July, 2005 to 11 January, 2011 (5 years and 8 months)

4. **Agricultural Engineer (Scientific Officer)**
   PAMP project of Farm Machinery and Postharvest Technology Division of BRRI
   Duration: From 26 June, 2004 to 19 July, 2005 (1 year)

5. **Field Engineer**
   REFPI Project of BAU/DFID and recruited by PROSHIKA. Worked with the NGO of PASA, Chunarughat, Habigonj, Worked with PASA (NGO), a partner organization of PROSHIKA.
   Duration: From 01 December, 2001 to 30 September, 2003 (1 year and 9 months)

6. **Research Assistant**
   A BAURES project, BAU, Mymensingh, project title: Appropriate and Efficient hand tools use in the farming system of Bangladesh
   Duration: From 01 July, 2001 to 30 November, 2001 (05 months)

7. **Research Assistant**
   A BAURES project, BAU, Mymensingh under the Ministry of Science & Technology. Project title "Domestic roof rain water collection and its storage
   Duration: From 01 July, 2000 to 30 June, 2001 (1 year)

6. Training received (In country)-19

1. Service Process Simplification (SPS) under a2i program of ICT Division, from 29 February to 01 March, 2020
2. Data organizing, analysisng, interpreting and presenting Organized by ACIAR funded NUMEN and CA project at Khulna, Bangladesh from 15-17 June, 2019
3. Project Formulation and Implementation , Organized by Planning Commission (Agriculture, Water Resources and Rural Institutes Division) at Dhaka, From 23-29 April, 2019
4. Operation of laboratory equipment, Organized by FMTD project of FMPHT division, BRRI from 17-19 December, 2013 (3 days)
5. Experimental design, layout and statistical analysis, Organized by FMTD project of FMPHT division, BRRI from 22-24 December, 2013 (3 days)
6. On-farm research methodology for NARS scientists, Organized by BARI, Gazipur from 16-21 November, 2013 (6 days)
7. Engineering drawing and design of small equipment by AutoCAD tools, Organized by DDMISSRMT project, WMM division, BRRI from 15-18 September, 2013 (4 days)
8. Participation in the 53 convention of IEB, Organized by IEB from 12-16 January, 2012 (5 days)
9. Application of ICT in agriculture using GIS on ArcView & ArcGIS technology, Organized by BRRI, Gazipur from 11-15 December 2011
10. Research Methodology, Organized by GTI, Mymensingh and Sponsoring , BARC from 09-22 September 2011 (13 days)
11. Financial Management of SPGR sub-project, Organized by BRRI, Gazipur under the NATP, Phase-1 project, BARC from 20-21 April, 2011 (2 days)
12. Intellectual Property for Gov. Officials and Lecturers from Tertiary Institutions, Organized by WIPO in corporation with the department of patents, designs and trademarks of Bangladesh from 09-19 September, 2009 (10 days)
13. Training workshop on Biometry, Organized by IRRI-BRRI Jointly at BRRI, Gazipur dated 24 April, 2009 (1 day)
14. 1-Month rice production training, Organized by BRRI from 27 July, 2008 to 25 August, 2008 (1 month)
15. Foundation Training Course for NARS Scientists, Organized by BARC-BARD, Comilla from 15 January, 2006 to 14 May, 2006 (04 months)
16. CAHD Program design, Implementation and Management (PDIM)-XVIII, Organized by CDD at Savar, Dhaka from 31 May, 2003 to 05 June, 2003 (6 days)
17. Safe motherhood, family planning & RTI/STD/HIV/AIDS, Organized by NIRAPAD-MA Project,

CARE- Bangladesh from 20-25 September, 2002 (6 days)

18. Homestead Vegetable Production technology for the NGO'S, Organized by HKI Bangladesh, BARD Comilla from 16-20 June, 2002 (5 days)
19. Rice Production, Organized by AAS-PETRRA, BRRI Gazipur from 05-10 January, 2002 (6 days)

7. Training received (Foreign)-8

1. Malaysia: 9th Annual Meeting of the Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) from 27 February - 1 March, 2023 at Kuala Lumpur, Malaysia
2. Thailand and Vietnam: Study tour on Agri-product processing, value addition, marketing and mechanization in Agriculture in Thailand and Vietnam from 04 to 14 November, 2019.
3. China: 5th meeting of the thematic working group (TWGs) of the Asia and Pacific Network for the Testing of Agricultural Machinery (ANTAM) 09 to 13 September, 2019 at Changsha, China.
4. Malaysia: 3rd meeting of the thematic working group (TWGs) of the Asia and Pacific Network for the Testing of Agricultural Machinery (ANTAM) 25 to 28 June, 2018 at Penang, Malaysia.
5. China: Agricultural Machinery Officials from countries along the belt and road Organized by Ministry of Agriculture, China from 6 to 26 September, 2017
6. Korea: Joint study on hand operated agricultural machinery Organized by RDA (Korea)-KOICA jointly from 26 August 2012 to 25 October 2012 (60 days)
7. Korea: Technical training on workshop machinery, Organized by KOICA funded project implemented by BRRI from 26 May 2012 to 10 June 2012 (15 days)
8. Japan: Post-Harvest Rice processing Organized by JICA Program of the Govt. of Japan at the Ministry of Agriculture, Forestry and Fisheries and the Japan Grain Inspection Association (KOKKEN) from 06 September 2008 to 07 November 2008 (64 days)

8. Attended in Workshop-7

1. Minimum tillage unpuddled transplanting of rice seedling
   International workshop jointly organized by BRRI, BARI, BARC, CIMMYT, ACIAR, Murdoch University and BAU from 16-17 September 2015 at BRRI, Gazipur, Bangladesh (2 days)
2. Conservation agriculture for smallholders in Asia and Africa
   Regional conference organized by BAU, BRRI, BARI, BARC, CIMMYT, IDE, ACIAR, Murdoch University, PROVA from 7-11 December 2014 at BAU, Mymensingh, Bangladesh (5 days)
3. Reduction of Post-Harvest Agricultural Crops Losses
   CIRDAP Auditorium, Dhaka at 23 November 2009 (1 day)
4. Agricultural Engineering Future Research Programmes-2009-2010 of NARS Institute
   Planning workshop organized by BARC, Dhaka at 29 June 2009 (1 day)
5. Strengthening Agricultural Mechanization: Polices and Implementation Strategies
   National workshop organized by BARC, Dhaka at 11 June 2007 (01 day)
6. Bridging the rice yield gap for food security
   BRRI-DAE workshop organized by BRRI-DAE from 19-21 September, 2006 (03 days)
7. Sterility in Boro rice
   National workshop organized by BRRI, Gazipur at 19 April, 2007 (01 day)

9. Computer literacy

- Programming
- Package Program
- MS-Access, MS Word, Power Point and Excel
- Statistical program
- MSTAT, SPSS, CropStat and Statistix10
- Engineering Program
- AutoCAD Engineering

10. Language & degree of Proficiency

- Medium of instruction in Bachelor and Master's level was English
- English reading-excellent, speaking-good and writing-good

11. Membership of professional societies

- The Institution of Engineers, Bangladesh (M/21528)
- Bangladesh Society of Agricultural Engineering (New: M-496)
- Bangladesh Rice Research Institute Scientist's Association (BRRISA)
- Life Member of JICA Alumni Association, Bangladesh (Reg. 1485)

12. Technology developed

12.a. As Principal Investigator: 11 (Elven)

Sl. No.	Name of technology	Year of invention/development
1	BRRI wet and dry land weeder	2006
2	BRRI USG applicator	2010
3	BRRI power weeder	2013
4	BRRI unpuddled rice transplanter	2017
5	BRRI rice transplanter cum prilled urea applicator	2018
6	BRRI adjustable type power weeder	2019
7	BRRI rice transplanter cum mixed fertilizer applicator	2019
8	BRRI forward motion manual rice transplanter	2020
9	BRRI Mini seed sower machine	2020
10	BRRI power operated rice transplanter	2020
11	BRRI multi-row power weeder	2023

12.b. As co-Principal Investigator: 12 (Twelve)

Sl. No.	Name of technology	Year of invention/development
1	Drum seeder leveler	2004
2	BRRI seed storage technology	2004
3	BRRI micro flour mill	2007
4	BRRI batch drayer	2007
5	BRRI power tiller leveler	2007
6	BRRI PTO operated lawn mower	2008
7	BRRI hand operated reaper	2009
8	BRRI prilled urea applicator	2015
9	BRRI panicle thresher	2016
10	BRRI air blow type rice mill	2017
11	BRRI conical weeder	2017
12	BRRI head feed thresher	2019

13. No. of research program:

- Developed: 58 **(Fifty eight)**
- Supervised: 91 **(Ninety one)**
- Executed: **81 (Eighty one)**

14. Project preparation and execution -7

Sl. no	Name of the project	Period	Funding	Responsibility
1	নতুন ০৬টি আঞ্চলিক কার্যালয় স্থাপনের মাধ্যমে স্থানভিত্তিক ধানের জাত ও প্রযুক্তি উদ্ভাবন এবং বিদ্যমান গবেষণাগার উন্নয়ন (Innovation of location-specific rice varieties and technologies by setting up 06 new regional stations and development of existing research laboratories)	জুলাই ২০২৩ - জুন ২০২৮ July 2923 to June 2028	জিওবি GoB	ফোকাল পয়েন্ট Focal Point
2	Validation and upscaling of rice transplanting and harvesting technology in the selected sites of Bangladesh	04/11/2021 to 03/11/2024	KGF	Principal Investigator
3	Development and validation of USG applicator and rice transplanter	01 July 2010 to 30 June, 2013	SPGR sub-project, NATP-1, PIU, BARC (ID:150)	Principal Investigator
4	Design and development of fertilizer deep placement mechanism for existing rice transplanter	01 January, 2018 to 30 December, 2020	PBRG sub-project, NATP-2, PIU, BARC (ID:064)	Principal Investigator
5	Development, validation and adoption of power weeder for wet land rice cultivation	01 July 2018 to 30 June, 2019	Special fund under MoA	Principal Investigator
6	Incorporation of prilled urea deep placement mechanism in the rice transplanter	01 July 2017 to 30 June, 2018	Special fund under MoA	Principal Investigator
7	Strengthening the Capacity of BRRI and Promotion of Bokto Seeding Technology in Bangladesh	01 July, 2009- 30 June, 2011	Bangladesh Govt and KOICA, Korea	Working Scientist

15. Paper Published as principal author (National and international journal-29)

1. Hossen, M.A., Kamruzzaman, M., Islam, S., Paul, H., Shahriyar, M.M. and Khan, A.U. (2022) Determination of Optimum Seed Rate of Hybrid Rice (Oryza sativa L.) Varieties in Mat-Type Seedling Raising for Mechanical Transplanting. Agricultural Sciences, 13, 1031-1047. https://doi.org/10.4236/as.2022.1310063
2. Hossen, M. A., Tamanna, T. A., Mamun, M. R. A. and Shahed, A. B. M. (2022). Impact of different treatments on mat type seedling. Journal of Science, Technology and Environment Informatics, 11(02), 756-763. Crossref: https://doi.org/10.18801/jstei.110222.76
3. Hossen, M. , Shahriyar, M. , Islam, S. , Paul, H. and Rahman, M. (2022) Rice Transplanting Mechanization in Bangladesh: Way to Make It Sustainable. *Agricultural Sciences*, 13, 130-149. doi: 10.4236/as.2022.132011.
4. Anwar Hossen, Sharmin Islam, Haimonti Paul and Mahir Shahriyar. 2022. Design, fabrication, and performance evaluation of a multi-rows power operated weeder for line transplanted rice field in Bangladesh, Asia-Pacific Journal of Science and Technology :Volume : 27. Issue : 03. Article ID.:

APST-27-03-11, 2022. DOI: 10.14456/apst.2022.52
5. Md. Anwar Hossen, Md. Ruhul Amin Talukder, Muhammad Rashed Al Mamun, Hafijur Rahaman, Subrata Paul, Md. Mizanur Rahman, Md. Miaruddin, Md. Azhar Ali and Md. Nurul Islam, 2020. Mechanization Status, Promotional Activities and Government Strategies of Thailand and Vietnam in Comparison to Bangladesh, AgriEngineering, MDPI, 23 September 2020.
6. Hossen, M. A., Bhuiyan, M. G. K., Rahman, M. M., Zaman M. K., Islam, M. M. and Rahman, M. A. (2020). Development of mixed fertilizer deep placement technology into soil simultaneously with mechanical rice seedling transplanting. Journal of Science, Technology and Environment Informatics, 09(02), 649-644. Crossref: https://doi.org/10.18801/jstei.090220.66
7. MA Hossen, MM Islam, M Uddin, RA Emon and M Kamruzzaman. 2019. Design and development of a manual paddy seeding machine for mat type seedling raising, Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh, Vol. 42/AE, Number 4, December 2019, p-45-53.
8. Hossen, M. A., M. Kamruzzam, M. M. Islam, M. A. Rahman, and M. S. Kabir. 2019. Fertilizers application simultaneously with mechanical rice transplanting in Bangladesh. Agricultural Engineering International: CIGR Journal, 21(4): 64–74. 1 Introductio
9. MA Hossen, MM Hossain, ME Haque and RW Bell. 2019. Inundation period of land for non-puddled mechanized transplanting of rice (*Oryza sativa* L.) with a small-scale mechanical transplanter, Journal of Agricultural Engineering, The Institute of Engineering, Bangladesh, Vol. 42/AE, Number 3. November, 2019.
10. MA Hossen, MK Zaman, MM Islam and AKMS Islam. 2019. Incorporation of prilled urea deep placement mechanism in the mechanical rice transplanter, Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh, Vol. 42/AE, Number 3. November, 2019.
11. MA Hossen. 2019. Mechanization in Bangladesh: Way of Modernization in Agriculture, International Journal of Engineering Trends and Technology (IJETT), Volume: 67, Issue: 9, pp: 69-77, Sep 2019. http://www.ijettjournal.org/Volume-67/Issue-9/IJETT-V67I9P212.pdf
12. M.A. Hossena, M.M. Hossainb, M.E. Haquec, R.W. Bell 2018. Transplanting into non-puddled soils with a small-scale mechanical transplanter reduced fuel, labour and irrigation water requirements for rice (Oryza sativa L.) establishment and increased yield. Field Crop Research 225(2018): 141-151.
13. M.A. Hossena, M.M. Hossainb, M.E. Haquec, R.W. Bell 2018. Effect of growing media on mat type seedling raised for mechanical rice transplanting. Res. Agr. Eng. Vol. 64, 2018 (3): 157–167. https://doi.org/10.17221/79/2016-RAE
14. MA Hossen, MM Hossain, ME Haque and RW Bell. 2018. Effect of Seed Rate on Seedling Quality for Mechanical Rice Transplanting, Bangladesh Rice J. 22 (1) : 9-23, 2018. http://www.brri.gov.bd/site/page/66b345b5-c0e7-4771-8f0c-1814eea12011?fbclid=IwAR1Pc_ALDjl3-b2VE3e7yVdGfONzBa6QNH9MeD9aFo616PvvaM2GZIj76NY
15. MA Hossen, MD Huda, MK Zaman, MM Islam and S Aktar (2018). Validation of walking and riding type rice transplanter in different location of Bangladesh, Eco-friendly Agril. J. 11 (04):43-59, 2018 (April)
16. MA Hossen, MA Rahman, MK Zaman and MM Islam (2016). Field evaluation of BRRI USG applicator in Dry and Wet season of rice cultivation. Bangladesh Rice J. 20(2):49-59, 2016. https://www.banglajol.info/index.php/BRJ/article/view/34128
17. Hossen MA, Hossain, Bell RW and Haque ME (2017). Effects of inundation period and tillage option on field performance of self-propelled rice transplanter. AgricEng Int: CIGR Journal Open access at http://www.cigrjournal.org , Vol. 19, No. 4, December, 2017
18. MA Hossen, MA Rahman, MK Zaman and MM Islam (2016). Field evaluation of BRRI USG applicator in Dry and Wet season of rice cultivation. Bangladesh Rice J. 20(2):49-59, 2016. https://www.banglajol.info/index.php/BRJ/article/view/34128
19. Hossen MA, Alam MA, Paul S and Hossain MA (2015). Modification and evaluation of a power weeder for Bangladesh condition. Eco-friendly Agril. J. 8(03): 37-46, 2015 (March)
20. Hossen MA, Islam MS, Rahman MA, Huda MD, Bhuyan MGK, Nath BC (2013).Design and Development of a manually operated urea super granule (USG) applicator. Published in the Journal of Agricultural mechanization in Asia, Africa and Latin America (AMM). Vol.44, no.2, Spring 2013.

21. Hossen MA, Hossain MM, Alam MM, Haque ME and Bell RW (2013). Performance evaluation of mechanical rice transplanter for Aman rice. Published in the Journal of Agricultural Machinery and Bioresources Engineering. Volume 6, No. 1&2, 2013. Pp.11-22.
22. Hossen MA, Rahman MA, Bhuyain MGK, Sarkar TK and Alam MA (2013). Improvement of BRRI USG applicator. Published in the Journal of Agricultural Machinery and Bioresources Engineering. Volume 6, No. 1&2, 2013. Pp.33-39.
23. Hossen MA, Islam MS, Huda MD, Bhuyan MGK, Nath BC (2010). Design and development of a weeder for both lowland and upland conditions. Published in the Journal of Agricultural mechanization in Asia, Africa and Latin America (AMM). Vol.42, no.2, Spring 2011.
24. Hossen MA, Huda MD, Islam AKMS, Misbahuzzaman M and Siddique MAB (2010). Performance evaluations of different close drum thresher (CDT) comparing with manual threshing. The Institution of Engineers, Bangladesh. Vol., 38/AE Number 1, June, 2010.
25. Hossen MA, Nath BC, Raihan ATMZ, Haque MA and Islam MS (2010). Performance evaluation of the BRRI developed wet and dry land weeder. Intl. J. BioRes.8 (1):27-3, January, 2010
26. Hossen MA, Alam MJ, Mowla G, Kamruzzaman M, Nath BC (2008). Multipurpose use of RDA Developed low-cost deep tube-well. Int. J. BioRes. 5(1):12-16, July 2008.
27. Hossen MA, Hussain MD, Haque MA, Ahiduzzaman M (2006). Present status of different water sources and potentiality of rain water as potable water: a study on some selected area in Bangladesh. J. Agric. Mach. Bioresour. Eng. 4 (1&2), 2006: 61-66.
28. Hossen MA, Mukul MHR, Islam SA, Dewan MMR (2006). Daily water requirement for drinking and cooking purposes of the rural people: A case study in Mymensingh district, Bangladesh. Int. J. BioRes. 1(2):22-25, August 2006.
29. Hossen MA, Huda MD, Dewan MMR, Islam SA, Sarkar TK (2006). Arsenic test and removal from tube-well water at control flow rate for drinking purpose. Int. J. Sustain. AgriL. Tech. 2(5): 26-30, July 2006. An on line Journal of "G-Science Implementation & Publication.

16. Published as co-author (National and international journal-50)

1. Syed Zahid Hasan, Warasa Mostafa, Md. Anwar Hossen, Muhammad Humayun Kabir, Hur-E-Ferdousi, Md. Omar Sharif. 2024. Liquid Nano Urea: Step Forward to Smart Agriculture- A Review, Journal of Agroforestry and Environment, Volume 17, Issue 1, 2024, Journal DOI: https://doi.org/10.55706/jae

2. Mst. Sabina Alim, Muhammad Rashed Al Mamun, Md. Anwar Hossen, Anamica Chowdhury Keya, Md. Ahsanul Hoq Mazumdar Fahim, Gazi Tamiz Uddin, and Joyshankar Baidya. 2024. *Drying and Tempering Influence on the Milling Quality of Parboiled Rice*. European Journal of Agriculture and Food Sciences, Vol 6; Issue 2; DOI: 10.24018/ejfood.2024.6.2.790

3. Khan, A.U., Islam,A.S., Pintu, Md.K., Paul, S., Huda, Md.D.,Hossen, Md.A., Islam, Md. M. and Ahmmed, Md. M. 2024. Assessment of BRRI WholeFeed Combine Harvester (Model BRRIWCH2021) for Mechanized Rice Harvest-ing in Bangladesh. Agricultural Sciences, 15,274-291.https://doi.org/10.4236/as.2024.152016

4. M Afzal Hossain, H Rahaman, Md. M Ahmmed, A U Khan, MA Hossen, BD Nath, MD Huda, MGK Bhuiyan, and M Hossain. 2023. *Development of a Power Tiller Operated Safe Grain Cleaner*. American Journal of Pure and Applied Biosciences. 5(5), 116-123, 2023. https://doi.org/10.34104/ajpab.023.01160123

5. Muhammad Rashed Al Mamun, Anamica Chowdhury Keya, Mst. Sabina Alim, Md. Anwar Hossen, Md. Fuad Mondal, Md. Janibul Alam Soeb. 2023. Potentiality assessment of solar based LED light trap as pest management tool in tea (*Camellia sinensis* L.), Smart Agricultural Technology, Volume 5, October 2023, 100304 *https://www.sciencedirect.com/science/article/pii/S2772375523001338?fbclid=IwAR0Iy5PysYirhApcE43FgFeDpyx0M139RnRHENiBtr0h9JswtbRvhtgowzs*

6. Setara Begum, M. S. Islam, M. M. Rashid, M. R. Manir, M. H. Rahman, Md. Anwar Hossen. 2022. Efficacy of Mechanical Seedling Transplanter and Deep Placement of Mixed Fertilizer on Rice Yield, December 2022, Asian Journal of Advances in Agricultural Research, DOI: 10.9734/ajaar/2022/v20i2395
7. Shamima Shammi, Md Anwar HossenMuhammad Rashed Al MamunMd Janibul Alam Soeb. 2022. Temporal and spatial representation of temperature and moisture in drying chamber and its impact on vertical vacuum dehumidifying rice seed dryer performance, Journal of Agriculture and Food Research, journal homepage: www.sciencedirect.com/journal/journal-of-agriculture-and-food-research, https://doi.org/10.1016/j.jafr.2022.100424
8. Nath, B.C., Paul,S., Huda, M.D., Hossen, M.A., Bhuiyan, MGK and Islam, AKM S. (2022) Combine Harvester: Small Machine Solves Big Rice Harvesting Problem of Bangladesh. Agri-cultural Sciences, 13, 201-220. https://doi.org/10.4236/as.2022.132015
9. Anika Tasnim, Muhammad Rashed Al Mamun, Md. Anwar Hossen, Md Towfiqur Rahman and Md.Janibul Alam Soeb, 2022. Comparison Effect on Biogas Production fromVegetable and Fruit Waste with Rumen DigestaThrough Co-Digestion Process, European Journal of Energy Research, www.ej-energy.org, DOI: 10.24018/ejenergy.2022.2.1.38
10. Muhammad Rashed Al Mamun, Asif Al Razi Nabil, Sadia Ashrofi Fairuz, Md. Anwar Hossen, Md. Janibul Alam Soeb and Shamima Shammi. 2021. Integration of vertical floating bed for red amaranth cultivation in low land areas of Bangladesh, AIMS Agriculture and Food, 6(4): 969–987. DOI: 10.3934/agrfood.2021058
11. Tangina Aktar Tamanna, Md. Anwar Hossen, Muhammad Rashed Al Mamun, and A.B.M. Shahed. 2021. Mitigation of Biotic and Abiotic Stresses in Mat Type Seedlings Raised for Mechanical Rice Transplanter, American Journal of Pure and Applied Biosciences Journal homepage: www.universepg.com/journal/ajpab, https://doi.org/10.34104/ajpab.021.01250134
12. Paul, H., Hossen, M. A., Islam, S., Rahman, M. M. and Rahman, M. A. (2020). Ergonomic study of BRRI multi-row power weeder for rice cultivation. Journal of Science, Technology and Environment Informatics, 10(01), 685-693. Crossref: https://doi.org/10.18801/jstei.100120.69
13. H Paul, S Paul, MA Hossen, S Islam, S Paul, MGK Bhuiyan. 2019. Evaluation of BRRI multi-rows power weeder: A case study under silty loam soil at Sadar, Gazipur, Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh, Vol. 42/AE, Number 4, December 2019, p-77-83.
14. R Nath Jha, MS Ansari, M Thakur, MM Islam and MA Hossen. 2019. Impact study of machinery uses on different rice cultivation practices at agricultural machinery testing and research centre (AMTRC), Nawalpur, Sarlahi, Nepal. Eco-friendly Agril. J. 12(11):90-99, 2019 (Nov.). http://efaj-international.com/articles-by-subject/agriculture-and-environment-engineering/
15. R Nath Jha, MS Ansari, M Thakur, MM Islam and MA Hossen. 2019. Study the impact of different agricultural machinery uses on wheat cultivation practices at Agricultural Machinery Testing and Research Centre (AMTRC), Sarlahi, Nepal. Eco-friendly Agril. J. 12(11):100-111, 2019 (Nov.). http://efaj-international.com/articles-by-subject/agriculture-and-environment-engineering/
16. S Islam, MD Huda, MGK Bhuiyan, MA Hossen, H Paul, M Ahiduzzaman. 2019. Prospect of rice straw biomass briquette production: An alternative source of energy, Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh, Vol. 42/AE, Number 3, November 2019, p-79-86.
17. H Paul, MA Hossen, MD Huda, S Islam, MGK Bhuiyan, BC Nath, MA Rahman. 2019. Performance evaluation of power operated automatic seed sower machine of mat type rice seedling machine, Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh, Vol. 42/AE, Number 3, November 2019, p-69-77.
18. Richard W. Bell, Md. Enamul Haque, M. Jahiruddin, Md. Moshiur Rahman, Mahfuza Begum, M. A. Monayem Miah, Md. Ariful Islam, Md. Anwar Hossen, Nazmus Salahin, Taslima Zahan, Mohammad Mobarak Hossain, Md. Khairul Alam and Mir Nurul Hasan Mahmud. 2018. Conservation Agriculture for Rice-Based Intensive Cropping by Smallholders in the Eastern Gangetic Plain, 22 December 2018, Journal of Agriculture, MDPI.
19. MA Alam, MA Hossen, AKMS Islam, MM Alam. 2018. Performance evaluation of power operated

reapers for harvesting rice at farmers' field. J. Bangladesh Agril. Univ. 16(1): 144-150, 2018.
20. AKMS Islam, MA Hossen, MKA Bhuiyan, MM Islam and MA Rahman. 2018. Performance of Weeder in Mechanically Transplanted Rice Cultivation, Bangladesh Rice J. 22 (1) : 25-34, 2018. http://www.brri.gov.bd/site/page/66b345b5-c0e7-4771-8f0c-1814eea12011?fbclid=IwAR1Pc_ALDjl3-b2VE3e7yVdGf ONzBa6QNH9MeD9aFo616PvvaM2GZIj76NY
21. AKMS Islam, MA Hossen, MKA Bhuiyan, MM Islam and MA Rahman. 2017. Effectiveness of weed control methods in mechanically transplanted rice. Bangladesh J Weed Sci. 6 (1&2): 77-79, 2017.
22. MS Islam, MM Rashid, E Hossain, MSI Mamin, M Kamruzzaman and MA Hossen. 2016. Comparative study of BRRI dhan41 and local variety Rajasail under direct wet seeded method at coastal char land of Bangladesh, Eco-friendly Agril. J. 9 (12):88-92, 2016 (December)
23. S Paul, MA Hossen, BC Nath, MA Rahman, S Hosen (2016). Effect of soil settling period on performance of rice transplanter, Int J. Sustain. Agril. Tech. 12(11): 14-20, November 2016
24. MM Hossain, MA Hossen, MA Rabbani. 2016. Conservation Agriculture and Sustainability, 6th Agro Tech Bangladesh-2016, Organized by RDA, MoLGRD, www.rda.gov.bd and www.limraexpo.com
25. B C Nath, M A Hossen, A K M S Islam, M D Huda, S Paul, M A Rahman. 2016. Postharvest Loss Assessment of Rice at Selected Areas of Gazipur District. Bangladesh Rice J. 20 (1) : 23-32, 2016 https://www.banglajol.info/index.php/BRJ/article/view/30626
26. Dewan MMR, Mondal S, Islam MS, Mukul MHR and Hossen MA (2014). Study on correlation and path analysis of the yield contributing characters of different ash gourd accessions. Eco-friendly Agril. J. 7(01): 01-05, 2014 (January)
27. Kamruzzaman M, Awal MA, Hossen MA, Paul S, Nath BC and Islam MA, Protection of seedling in tray for mechanical rice transplanting from effect of cold weather using polythene shed, Bangladesh journal of progressive science & technology (BJPST): 12(1):005-010, January, 2014, Online version: *www.bjpst.net*
28. Islam AKMS, Rahman MA, Hossen MA, TH Ansari and Karmakar B (2013). Evaluation of mechanical rice transplanter in unpuddled transplanting of wet season rice in sandy loam soil. Published in the Journal of Agricultural Machinery and Bioresources Engineering. Volume 6, No. 1&2, 2013. Pp.59-67.
29. Sarkar TK, Awal MA, Ahiduzzaman M, Aktaruzzaman and Hossen MA. 2012. Evaluation of husk feeded modified updraft gasifier. Eco-friendly Agril. J. 5(06): 61-68, June 2012.
30. Sarkar TK, Islam AKMS, Nath BC, Rahman MA, Hossen MA and Ferdous N (2012). Sensory evaluation of premium quality rice cv. BRRI dhan50. Eco-friendly Agril. J. 5(03): 26-28, March 2012.
31. Rahman A, Panigrahi S, Kushwaha RL, Alam MM, Bhuiyan MGK and Hossen MA (2011). Physio-chemical properties of compression molded fine flax fiber-reinforced composite. Eco-friendly Agril. J. 4 (06): 628-632, June 2011.
32. Islam AKMS, Ahiduzzaman M, Sarker RI and Hossen MA (2010). Potentials of rice husk fired power generation in Bangladesh: A case study. The Institution of Engineers, Bangladesh. Vol., 38/AE Number 2, December, 2010.
33. Uddin MJ, Islam MS, Jinat N, Misbahuzzaman and Hossen MA (2010). Study on opportunities and problems of agricultural machinery manufacturing workshops. Eco-friendly Agril. J. 3 (10): 473-479, October, 2010.
34. Bhuiyan MGK, Huda MD, Islam AKMS, Hossen MA and Islam MS (2010). Study the adoption status of Farm Machinery in Some selected sites of Bangladesh. Journal of Agricultural Engineering. The Institution of Engineers, Bangladesh. Vol., 38/AE Number 1, June, 2010.
35. Islam SA, Dewan MMR, Mukul MHR, Hossen MA and Khatun F (2010). *In vitro* Regeneration of Anthurium andreanum cv. Nitta. Bangladesh J. Agril. Res. 35(2): 217-226, June 2010.
36. Hossain ABM Zahid, Bhuiyan MGK, Hossen MA and Huda MD (2010). Development of a method for selecting two wheel drive tractor. Eco-friendly Agril. J. 3 (3): 154-158, March, 2010.
37. Nath BC, Hossen MA, Roy Devjit, Rahman MA and Hossain MA (2009). Design and construction of microlysimeters to determine evapotranspiration of rice. Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh. Vol. 36/AE, June, 2009.
38. Dewan MMR, Haque MA, Hossen MA, Islam SA and Mukul MHR (2009). Variability study of yield and yield contributing characters of forty-six ash gourd accessions. Eco-friendly Agril. J. 2(2):433-437, 2009 (February)

39. Sarker MRA, Islam SA, Akhand MAM, Dewan MMR and Hossen MA (2009). Influence of different rates of nutrients and planting density on the yield of BRRI dhan44. Intl. BioRes. 6(1):7-11, January, 2009.
40. Islam MS, Rahman SMM, Rahaman MA, Quasem MA, Huda MD, Islam AKMS, Ahiduzzaman M, Bhuiyan MGK, Hossen MA and Baqui MA. 2009. Mechanized Rice Cultivation in Bangladesh: Past Experiences and Future Potentials. In Agricultural mechanization in Asia, Africa and Latin America 2009 Vol. 40, No. 1, 36-40.
41. Saha RC, Muhury N, Khair MA, Hossen MA and Nath BC (2008). Design and construction of a single acting Diaphragm pump for low lift irrigation. Eco-friendly Agril. J. 1(5): 264-269, 2008 (December).
42. Nath BC, Satter MA, Hossen MA, Mowla MG, Islam MM (2008). Comparative study of belt pulley and tyre strip coupling systems for centrifugal pump. Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh. Vol. 35/AE, December, 2008.
43. Dewan MMR, Talukder MSA, Hossen MA, Sarker MRA, Islam SA (2008). A study on mustard seed quality in different storage containers. Eco-friendly Agril. J. 1(4): 198-201, 2008 (November).
44. Kamruzzaman M, Hossain MM, Hossen MA, Sarkar TK (2008). Performance study of rice husk briquette machine: A case study in Muktagacha of Mymensingh district, Bangladesh. Int. J. BioRes. 5(1):7-11, July 2008.
45. Alam MJ, Hossen MA, Nath BC, Mowla G, Bhuyan GK (2007). Performance evaluation of RDA developed low-cost deep tube well. Journal of Agricultural Engineering, The Institution of Engineers, Bangladesh. Vol. 33/AE, December, 2007: 43-49.
46. Hossen MK, Dewan MR, Hossen MA, Mukul MHR and Islam SA (2007). Study the effect of crop establishment methods on the Agro Economic productivity of Aman rice. Intl. BioRes. 3(2):29-34, August, 2007.
47. Mukul MHR, Debnath SK, Parveen S, Hossen MA and Islam MF (2007). Study on the Sorption and Retention Behaviour of Phosphorus in Soils. Int. J. Sustain. Agril. Tech 3(4):54-59, August, 2007.
48. Ahiduzzaman M, Baqui MA, Bhuiyan MGK, Rahman MA, Islam MS, Hossen MA (2006). Improvement of a Low-Cost Rice weeder . J. Agric. Mach. Bioresour. Eng. 4 (1&2), 2006: 75-79.
49. Hussain MD, Hossen MA, Haque MA, Islam MS (2001). Rainwater quality tests on G.I. sheet storage tank system. Progress. Agric. 12 (1&2): 193-197, 2001.
50. Hussain MD, Haque MA, Islam MS, Hossen MA, Islam MS (2001). Field trials on removal of arsenic from tubewell water for drinking purpose. Progress. Agric. 12 (1&2): 217-219, 2001.

17. Paper published in the conference proceedings-6

1. MA Hossen, MM Hossain, RW Bell, ME Haque and MA Rahman (2017). Development and validation of unpuddled riding-type rice transplanter for wet land rice establishment, CASH-II, 14-16, February 2017.
2. Hossen MA, Hossain MM, Alam MM, Haque ME and Bell RW (2014). Evaluation of a mechanical rice transplanter under minimum tillage unpuddled soil conditions. Paper published in the conference proceedings. Regional conference on conservation agriculture for smallholders in Asia and Africa. 7-11 December 2014, Mymensingh, Bangladesh. Pp. 10-12.
3. Hossen MA, Hossain MM, Haque, Bell RW and Rahman MA (2014). Optimization of seedling density as influenced by seed rate for mechanical transplanting. Paper published in the conference proceedings. Regional conference on conservation agriculture for smallholders in Asia and Africa. 7-11 December 2014, Mymensingh, Bangladesh. Pp. 48-49.
4. Hossen MA, Hossain MM, Alam MM, Haque ME and Bell RW (2014). Study on inundation periods of land for mechanical transplanting under minimum tillage unpuddled transplanting. Paper published in the conference proceedings. Regional conference on conservation agriculture for smallholders in Asia and Africa. 7-11 December 2014, Mymensingh, Bangladesh. Pp. 68-69.
5. Hossen MA, Hossain MM, Alam MM, Haque ME and Bell RW (2014). Development of the riding-type rice transplanter for unpuddled transplanting. Paper published in the conference proceedings. Regional conference on conservation agriculture for smallholders in Asia and Africa. 7-11 December 2014, Mymensingh, Bangladesh. Pp. 70-71.
6. Farm Machinery and Postharvest Technology activities on Rice production and Processing, 2019. 7th

Int Conf. on data science and SDGs, 18-19 December, 20219 at Statistics Department, Rajshahi University, Rajshahi, Bangladesh.

18. Paper published in the workshop proceedings-2

1. Islam MS, Rahman SMM, Quasem MA, Huda MD, Islam AKMS, Ahiduzzaman M Bhuiyan MGK, Hossen MA (2006). Mechanized rice cultivation in Bangladesd: Fast experiences and future potentials. Paper presented at the 21st BRRI-DAE workshop on 'Bridging the rice yield gap for food security".
2. Islam MS, Rahman SMM, Quasem MA, Huda MD, Islam AKMS, Ahiduzzaman M, Bhuiyan MGK, Hossen MA, Kamruzzaman M, Sarkar TK and Nath BC (2010). Resource conservation and Farm Mechanization for rice production. Paper prepared to present in the BRRI-DAE workshop, BRRI, Gazipur-1701.

19. Published bulletins as author and co-author-7

1. Rahman SMM, Huda MD, Islam AKMS, Bhuiyan MGK, Hossen MA, Nath BC, Kamruzzaman M, Paul S, Alam MA (2014). Hand book on Introduction of BRRI machinery and Technology, Farm Machinery and Postharvest Technology Division, Bangladesh Rice Research institute, Gazipur, Bangladesh.
2. Rahman SMM, Islam AKMS, Hossen MA, Paul S (2014). Boucher on operational and maintenance techniques on BRRI developed rice-wheat power thresher under the FMTD project, Farm Machinery and Postharvest Technology Division, Bangladesh Rice Research institute, Gazipur, Bangladesh.
3. Hossen MA, Islam MS, Huda MD, Rahman SMM, Sarkar TK and Alam MA (2013). Techniques of rice transplanter operation and troubleshooting, Farm Machinery and Postharvest Technology Division, Bangladesh Rice Research institute, Gazipur, Bangladesh.
4. Rahaman MA, Nath BC, Hossen MA, Islam AKMS and Paul S (2011). Improved processing technology of long grain aromatic rice. Farm Machinery and Postharvest Technology Division, Bangladesh Rice Research institute, Gazipur, Bangladesh.
5. Huda MD, Hossen MA and Islam MS (2011). Seedling raising techniques of rice mechanical rice transplanter. Farm Machinery and Postharvest Technology Division, Bangladesh Rice Research institute, Gazipur, Bangladesh.
6. Hossen MA, Islam MS and Huda MD (2010). Brochure on BRRI USG Applicator under the project of "Development and validation of USG Applicator and Rice Transplanter. Farm Machinery and Postharvest Technology Division, Bangladesh Rice Research institute, Gazipur, Bangladesh.
7. Islam M.S., Rahman SMM, Rahman MA, Huda MD, Quasem MA,. Islam AKMS, Ahiduzzaman M, Bhuiyan MGK, Hossen MA, Kamruzzam M, Sarker TK and Nath BC (2009). Brochure on BRRI Farm Machinery and Technology. Farm Machinery and Post Harvest Technology Division, Bangladesh Rice Research institute, Gazipur, Bangladesh.

20. Published Books-15

1. MA Hossen, MGK Bhuiyan, MM Islam, S Mahir and MA Rahman. 2020. Rice transplanter cum mixed fertilizer, publication number 301 (1st edition), BRRI, Gazipur, Bangladesh. 1000P.
2. MA Hossen, M Kamruzzaman, MM Islam, AKMS Islam and MA Rahman. 2016. Rice transplanter cum prilled urea applicator, publication number 247 (1st edition), BRRI, Gazipur, Bangladesh. 100P.
3. Hossen MA. 2016. Development of rice transplanter for unpuddled condition. PhD Thesis in Farm Power Machinery, Bangladesh Agricultural University, Mymensingh. 80p.
4. Hossen MA. 2013. Development and Validation of USG applicator and Rice transplanter, A project completion report under PIU, NATP-1, BARC, Dhaka. 80p.
5. MA Hossen. A Alam and HK Kim. 2013. Development and evaluation of a power weeder for Bangladesh, Chapter IV, Pages 148-182 in Development of research capacity of Bangladesh Rice Research Institute, A study report on the Agricultural Machinery for Bangladesh, KOICA, KDS, South Korea.
6. Hossen MA. 2001. Rain water collection, Storage and Its potentiality for rural people. Master's Thesis in Farm Power Machinery, Bangladesh Agricultural University, Mymensingh. 80p.

7. MA Hossen. 2000. Soyamilk and Curd preparation from different graded Soya- bean. An undergraduate project report, submitted to the Department of Food Technology and Rural Industries, Bangladesh Agricultural University, Mymensingh, 80p.
8. Haque ME, Bell RW, Jahiruddin M, Hossain MM, Rahman MM, Begum M, Hossen MA, Salahin N, Zahan T, Hossain MM, Hashem A, Islam MA, Vance WH, Hossain MI, Esdail RJ and Kabir ME. 2022. Krishi Shurokha Poddoti Baboharik Batboi, Murdoch University. 186p.
9. Haque ME, Bell RW, Jahiruddin M, Hossain MM, Rahman MM, Begum M, Hossen MA, Salahin N, Zahan T, Hossain MM, Hashem A, Islam MA, Vance WH, Hossain MI, Esdail RJ and Kabir ME. 2018. Manual for smallholders' conservation agriculture in rice based systems. Murdoch University. 108p.
10. AKMS Islam, MA Hossen, MKA Bhuiyan and MA Rahman. 2017. Weed management in mechanically transplanted rice. Publication number 224. Bangladesh Rice Research Institute, Gazipur, Bangladesh, 52p.
11. AKMS Islam, MA Hossen, MM Islam and MA Rahman. 2016. Enhancement of crop productivity and reduction of production cost using farm machinery, submitted to the project director, IAPP project. BRRI Part, Gazipur, Bangladesh, 38p.
12. MA Quasem, MGK Bhuiyan, MA Hossen and TK Sarkar. 2005. Baseline survey report on farm mechanization of Gazipur Sadar, Gazipur (Report # 1) under Popularizing BRRI developed agricultural machinery to augment mechanized rice cultivation in Bangladesh (PAMP) project, 54p.
13. MA Quasem, MGK Bhuiyan, MA Hossen and TK Sarkar. 2005. Baseline survey report on farm mechanization of Bhaluka, Mymensingh (Report # 2) under Popularizing BRRI developed agricultural machinery to augment mechanized rice cultivation in Bangladesh (PAMP) project, 50p.
14. MA Quasem, MGK Bhuiyan, MA Hossen and TK Sarkar. 2005. Baseline survey report on farm mechanization of Ghatail, Tangail (Report # 3) under Popularizing BRRI developed agricultural machinery to augment mechanized rice cultivation in Bangladesh (PAMP) project, 48p.
15. MA Quasem, MGK Bhuiyan, MA Hossen and TK Sarkar. 2005. Baseline survey report on farm mechanization of Sherpur Sadar, Sherpur (Report # 4) under Popularizing BRRI developed agricultural machinery to augment mechanized rice cultivation in Bangladesh (PAMP) project, 53p.

21. Published Popular Articles (Monographs)-22

1. MA Hossen. 2023. Published article on "SMART Farming" in the daily Janakantha. 6 February, 2022.
2. MA Hossen. 2022. Published another article on "Key factors for optimal performance of combine harvester" in the Asian Age news paper (both in E-paper and printed). 21 December, 2022
3. MA Hossen. 2022. Published article on Agril mechanization and transformation in the Asian Age news paper (both in E-paper and printed). 25 November, 2022
4. MA Hossen. 2021. Agricultural mechanization- An integrated system is needed https://www.deshrupantor.com/epaper/home/page/2022-02-24/7, 2022.
5. MA Hossen. 2022. Transformation of agriculture into the web of development, https://www.researchgate.net/publication/359186855_dainika_janakantha_unnayanera_dharaya_krsira_rupantara
6. MA Hossen. 2022. Production of mat-type rice seedlings raising for economical mechanical transplanting. http://agrilife24.com/2021/2018-03-19-12-26-20/6552-mts18j.html, 2021
7. MA Hossen. 2021. The use of technology in agriculture is increasing to prevent wastage of paddy and rice in the country https://www.jaijaidinbd.com/feature/agriculture-and-posibility/238760, 2022
8. MA Hossen. 2020. Synchronized cultivation - A science based method), March 2021, DOI: 10.13140/RG.2.2.31368.96000
9. MA Hossen. 2020. Use of modern technology in agriculture: can save 27-28 thousand crore rupees per year, http://agrilife24.com/2020/2018-03-19-12-26-20/4112-anwa-20aug.html, 20 August, 2020
10. MA Hossen. 2020. Intellectual Property Rights Practice: Awareness should be raised, http://agrilife24.com/2020/2018-03-19-12-26-20/4161-anwa-27aug.html
11. MA Hossen. 2020. What to do in sustainable agricultural mechanization, Published in the Agrilife online paper: Agrilife24.com in Bangla at 13 June, 2020.
12. MA Hossen. 2020. Suitable seedling raising for mechanical transplanting in Aman season. Published in the Agrilife online paper: Agrilife24.com in Bangla at 17 June, 2020.

13. MA Hossen. 2020. Sustainable agricultural mechanization and agricultural engineers go hand in hand. Published in the Agrilife online paper: Agrilife24.com in Bangla at 18 June, 2020.
14. MA Hossen. 2020. Agricultural mechanization will increase employment. Published in the Agrilife online paper: Agrilife24.com in Bangla at 21 June, 2020.
15. MA Hossen. 2020. Agricultural engineers and sustainable mechanization are the future of agriculture. Published in the Prothom Alo online pape in Bangla at 6 July, 2020.
16. MA Hossen. 2020. Rice Transplanter: Potential Problems and Solutions at Field Level. Published in the Agrilife online paper: Agrilife24.com in Bangla at 14 August, 2020.
17. MA Hossen. 2020. 60th Birthday of Bangladesh Agricultural University: I am proud to be a Bakribian. Published in the Agrilife online paper: Agrilife24.com in Bangla at 18 August, 2020.
18. MA Hossen. 2020. Use of modern technology in agriculture: can save Tk. 27-28 thousand crore per year. Published in the Agrilife online paper: Agrilife24.com in Bangla at 20 August, 2020.
19. MA Hossen. 2020. Agri; Mechanization vs man-machine relation. Published in the Agrilife online paper: Agrilife24.com in Bangla at 27 August, 2020.
20. MA Hossen. 2009. Rice bran oil and its prospects in Bangladesh. Article published in "The Daily Bangladesh Observer" dated 26th June 2009, pp.5.
21. MA Hossen. 2009. Rice grain nutrition and BRRI varieties. Article published in "The Daily Bangladesh Observer" dated 16th April 2009, pp.4.

22. Published Monographs-3

1. MA Rahman, MD Huda, AKMS Islam, MGK Bhuiyan, MA Hossen, BC Nath, M Kamruzzaman, S paul, AKMLR Ajad, MA Alam and MK Zamna. 2014. BRRI Krishi Jantra abong Projukti Parichiti. A Bangla leaflet published under "Agricultural Machinery Technology Development and Dissemination" project of FMPHT division, BRRI funded by GoB.
2. MA Rahman, AKMS Islam, MA Hossen and S Paul. 2014. BRRI Udvabita Dhan-gom Marai Jantra, Chalona O Rokkonabekkon Nirdeshika. A Bangla leaflet published under "Agricultural Machinery Technology Development and Dissemination" project of FMPHT division, BRRI funded by GoB.
3. MA Rahman, MD Huda, AKMS Islam, MGK Bhuiyan, MA Hossen, BC Nath, M Kamruzzaman, S paul, AKMLR Ajad, MA Alam and MK Zamna. 2015. BRRI Krishi Jantra abong Projukti Parichiti. A Bangla leaflet published under "Agricultural Machinery Technology Development and Dissemination" project of FMPHT division, BRRI funded by GoB.

23. Published Bulletins-12

1. **MA Hossen**, MM Islam, MA Alam, S Islam, H Paul and MA Rahman. 2019. BRRI Shakti Chalita Agacha Nirani Jontra, Eksathe Ekadik Sarir Agacha Domon Kora Jai. A Bangla leaflet published under a research program title "Development, validation and adaptation of power weeder for wet land rice cultivation" FMPHT division, BRRI funded by MoA.
2. **MA Hossen**, MD Huda, MS Islam and MA Rahman. 2013. Field operation and troubleshooting of mechanical rice transplanter. Leaflet published under "Development and validation of USG applicator and rice transplanter" project of FMPHT division, BRRI funded by NATP-1, PIU, BARC.
3. **MA Hossen**, MD Huda, MS Islam, MA Rahman, TK Sarkar and MA Alam. 2013. Rice transplanter chalona koushal abong mather somosa durikoroner upai. A Bangla leaflet published under "Development and validation of USG applicator and rice transplanter" project of FMPHT division, BRRI funded by NATP-1, PIU, BARC.
4. **MA Hossen**. 2013. BRRI guti urea applicator. An advertisement published on main feature, capacity, limitation and technique of use in the daily Ittefaq. 12 March, 2013.
5. **MA Hossen**. 2013. BRRI guti urea applicator. An advertisement published on main feature, capacity, limitation and technique of use in the daily Independent. 12 March, 2013.
6. **MA Hossen**, MS Islam and MD Huda. 2012. BRRI Guti Urea Proyog Jantra. A Bangla leaflet published under "Development and validation of USG applicator and rice transplanter" project of FMPHT division, BRRI funded by NATP-1, PIU, BARC.
7. **MA Hossen**, MD Huda, MS Islam and MA Rahman. 2012. BRRI USG Applicator, for saving urea and profitability. Leaflet published under "Development and validation of USG applicator and rice transplanter" project of FMPHT division, BRRI funded by NATP-1, PIU, BARC.

8. **MA Hossen**, MS Islam and MD Huda. 2010. BRRI Guti Urea Proyog Jantra. A Bangla leaflet published under "Development and validation of USG applicator and rice transplanter" project of FMPHT division, BRRI funded by NATP-1, PIU, BARC.
9. **Hossen MA** (2009). Development of a weeder suitable for both lowland and upland conditions. Article published in "The Monthly Amar Khamar Amar Jibon" dated March 200
10. MD Huda, MA Alam, MGK Bhuiyan, **MA Hossen** and MA Hossen. 2019. BRRI Shassa Shukanu Jontrer Chalona O Rokkanabekkon Jantra. A Bangla leaflet published from Farm Machinery and Post-harvest Technology Division, BRRI.
11. BK Biswas, MA Ali and **MA Hossen**. 2018. Impact of depth of tillage on yield of rice production. Published in the writerpoal of BRRI website.
12. MD Huda, **MA Hossen** and MS Islam. 2011. Jantric Paddatite Dhaner Chara Ropaner Jonna Chara Utpadon Kolakoushal. A Bangla leaflet published under "Development and validation of USG applicator and rice transplanter" project of FMPHT division, BRRI funded by NATP-1, PIU, BARC.

24. Paper presented in the seminar -4

1. Hossen MA, 2022. Precision Agriculture under the sub-group of Cutting-edge technology aligned with 4IR at BRRI as Leader of study group.
2. Hossen MA. 2010. Design and development of a manually operated fertilizer (USG/UMG) applicator. Paper presented at the Thursday seminar at Bangladesh Rice Research Institute (BRRI) on 25 February, 2010.
3. Hossen MA, Islam MS, Huda MD. 2010. Development of a manually operated fertilizer (USG/UMG) applicator and its consequences on rice production. Paper presented in the Agriculture Symposium Campaign for Sustainable Rural Livelihoods (CSRL) 9-11 March 2010, National Press Club, Dhaka, Bangladesh.
4. Hossen MA. 2014. Project completion report presentation in the Project completion workshop of development and validation of USG applicator and rice transplanter under PIU-BARC (NATP Phase -1), 04 May, 2014.

25. Paper presented in Symposium-1

1. Hossen MA, Islam MS, Huda MD (2010). Development of a manually operated fertilizer (USG/UMG) applicator and its consequences on rice production. Paper presented in the Agriculture Symposium Campaign for Sustainable Rural Livelihoods (CSRL) 9-11 March 2010, National Press Club, Dhaka, Bangladesh

26. Book Review-1

1. Development Issue of Bangladesh-II. Edited by Ashraf Ali, Ruhul Kuddus and Syed Saad Andaleeb and Published by Mohiuddin Ahmed, The Univesity Press Limited, Red Crescent Building, 114 Motijheel C/A. Dhaka-100.

27. Research Report as Author-6

1. Utilization, Research and Extension of BRRI Developed Agricultural Machinery for Sustainable Agriculture, Farm Machinery and Postharvest Technology Division, BRRI, Paper presented in the mechanization workshop, dated 14 September, 2014
2. Domestic roof rain-water collection and its storage and distribution in rural areas of Bangladesh (2001). Final report of a Gov. funded project. Report submitted to Department of Farm Power Machinery, Bangladesh Agricultural University, Mymensingh.
3. Baseline survey in farm mechanization, Report #1, Dogori block, Gazipur sadar, Gazipur (2005). Report submitted to Project Director, PAMP, FMPHT division, BRRI, Gazipur.
4. Popularizing BRRI developed Agricultural Machinery to Augment Mechanized Rice Cultivation in Bangladesh (PAMP/GOB Fund) (2005). Annual Progress report of PAMP Regional Office, Gazipur Sadar, Gazipur. Report submitted to Project Director, PAMP, FMPHT division, BRRI, Gazipur.
5. Popularizing BRRI developed Agricultural Machinery to Augment Mechanized Rice Cultivation in Bangladesh (PAMP/GOB Fund) (2005). Quarterly Progress report of PAMP Regional Office, Bogra. Report submitted to Project Director, PAMP, FMPHT division, BRRI, Gazipur.

6. Multipurpose use of low cost Deep-Tubewell project in Garmohasthan, Bogra. Report submitted to Course Director of the Attachment Programme with RDA, Bogra of the 13th Foundation Training Course for NARS Scientist at BARD, Comilla.

28. Paper reviewed-3

1. Title of the paper "Energy consumption pattern for rural household activities: A selected area of Mymensingh District" Code no.: IJBR 658, dated 14th November, 2010 International Journal of BioResearch.
2. Title of the paper "Effect of sowing time on Grass pea yield in the Southern region of Bangladesh" Code no.: IJBR 383, dated 05th February 2008. International Journal of BioResearch.
3. Title of the paper "Resource utilization under different cropping patterns in rice environment rain fed land in an area of Bangladesh" Code no.: IJBR 434, dated 24th May 2009. International Journal of BioResearch.

29. Radio program-3 and TV program-1

1. Participation as Kathak on "BRRI USG Appicator". Broadcast under the program of "Krishi Bisayak Karjakram", dated 30th August, 2010, Radio Bangladesh, Sherebangla Nagar-1207.
2. Participation as Kathak on "Field performance of BRRI USG Appicator". Broadcast under the program of "Krishi Bisayak Karjakram", dated 19th May, 2010, Radio Bangladesh, Sherebangla Nagar-1207.
3. Participation as Kathak on "BRRI rice-wheat thresher (Model-3)". Broadcast under the program of "Krishi Bisayak Karjakram", dated 03rd July 2009, Radio Bangladesh, Sherebangla Nagar-1207.
4. TV program in Bangla vision: 2018 on Agril machinery.

30. Service as research supervisor of MS student of different universities-8

SL No	Research title	Concern University	Year of passing	Registration number and session	Degree
1	Seedling raising technique for mechanical rice transplanter	Bangladesh Agricultural University, Mymensingh	June, 2013	32460 and 2005-2006	MS
2	Performance evaluation of an inclined plate seed metering device for maize planting under zero till drill	Bangladesh Agricultural University, Mymensingh	June, 2014	35573 and 2008-2009	MS
3	Evaluation of different growing media for mat type rice seedling raising	Sylhet Agricultural University, Sylhet	December, 2019	2537 and 2013-2014	MS
4	Mitigation of biotic and abiotic stress in mat type seedlings raising for mechanical rice transplanting	Sylhet Agricultural University, Sylhet	December, 2019	2487 and 2013-2014	MS
5	Performance evaluation of vertical vacuum dehumidifying rice seed dryer for small scale farmers of bangladesh	Sylhet Agricultural University, Sylhet	December, 2019	2539 and 2013-2014	MS
6	Standardization of spacing of mechanical transplanted rice seedling for yield maximization	Sylhet Agricultural University, Sylhet	December, 2021 (Reg. 2935 and Session: 2014-2015)		MS
7	Performance evaluation of forward motion manual operated rice transplanter for wet land rice establishment	Sylhet Agricultural University, Sylhet	December, 2021 (Reg. 2947 and Session: 2014-2015)		MS
8	Effect of drying and tempering on milling performance of premium quality rice	Sylhet Agricultural University, Sylhet	December, 2021 (Reg. 2979 and Session: 2014-2015)		MS
9	Effect of paddy and soil conditions on the performance of whole feed combine harvester	Sylhet Agricultural University, Sylhet	ID-2201050106 Reg.No.: 3794 Session: 2016-2017		MS

10	Effect of paddy and soil conditions on the performance of head feed combine harvester	Sylhet Agricultural University, Sylhet	ID: 2201050105 Reg. No: 3779 Session: 2016-2017	MS
11	Harvesting efficiency of combine harvester as affected by paddy field size and operator's skill	Sylhet Agricultural University, Sylhet	ID-2201050107 Reg.No.: 3763 Session: 2016-2017	MS
12	Business viability of different combine harvester in Habiganj and Sirajganj area	Sylhet Agricultural University, Sylhet	ID-2201050108 Reg.No.: 3795 Session: 2016-2017	MS
13	Effect of rpm and polishing pressure on head-rice recovery of parboiled paddy	Sylhet Agricultural University, Sylhet	Reg. No. :4193 Session: 2017-18	MS
14	Effect of rpm and polishing pressure on head-rice recovery of un-parboiled paddy	Sylhet Agricultural University, Sylhet	Reg. No. :4193 Session: 2017-18	MS

31. Others

1. Expert member of the Regional Council of Agricultural Machinery Associations in Asia and Pacific (ReCAMA)
2. Expert member in the technical committee of ANTAM (The Asian and Specific Network for Testing of Agricultural Machinery) under CSAM, ESCAP.
3. Prepared ANTAM code for testing of paddy transplanter, code no. 002-2018
4. Patented BRRI prilled urea applicator as co-investigator.
5. Evaluated different thesis as a member of the MS thesis evaluation committee
6. Conducted feasibility studies of the formulated research project entitle "Strengthening research capacity of BRRI through country-wise expansion" as member secretary of the feasibility committee.
7. Developed a mega project entitle "Research capacity building of BRRI through country-wide expansion" which
8. h is under process of approval.

01.06.2025
(Dr. Md. Anwar Hossen)