

Curriculum Vitae

Mohammad Afzal Hossain



Personal Information:

Name : Mohammad Afzal Hossain
Father's Name : Mohammad Sahajuddin Sarker
Present Address : D-1/14 (Biplob), BRRI Campus, Gazipur-1701
Permanent Address : Vill: Barapusia, P.O: Bhawal Chandpur,
Upazilla: Kapasia, Dist: Gazipur.
Date of Birth : December 1, 1982
Age (01/04/2015) : 32 years 04 months

Education Qualification

Degree/ Certificate	Division/Class/CGPA	University/Board	Year
Master of Science (MS) in Farm Structure	3.598	Bangladesh Agricultural University, Mymensingh	2008
Bachelor of Science (BSc.) in Agricultural Engg.	Second	Bangladesh Agricultural University, Mymensingh	2004
Higher Secondary Certificate (HSC)	First	Dhaka Board	1999
Secondary School Certificate (SSC)	First	Dhaka Board	1997

Research Experience : (7 years and 4 months)





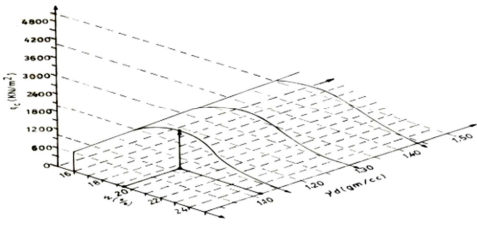
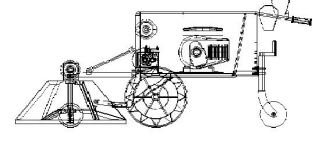
1. Working as **Senior Scientific Officer** in Workshop Machinery and Maintenance Division, BRRI, Gazipur from 16 April 2014 to till date.
2. Worked as **Working Scientist** of **Mujibnagar Integrated Agricultural Development Project** of BRRI part, in Jinedah District from 16 April 2012 to 24 August 2014.
3. Worked as **Scientific Officer** in Workshop Machinery and Maintenance Division, BRRI, Gazipur from 12 November 2007 to 15 April 2014.
4. Worked as **Co-investigator** in Design, development, modification, and introduction of self-propelled reaper to augment crop production project, BRRI, Gazipur.

Other Experiences:

1. **Professional Training:** Successfully completed trainings on Application Software's for Agricultural Research, Research Methodology, On-farm research methodology, Rice Production, Communication and Office Management, Foundation Training Course for NARS Scientists etc.
2. **Prepared and delivered lectures** for graduate and undergraduate courses at Civil Engineering Department in Royal Institute of Technology (RIT), Gazipur for one and half years.
3. **Article Writing:** "Technique of reducing post harvest losses of rice, Hybrid rice and seed production, Causes of sterility on Boro rice, খাদ্য ঘাটতি মোকাবেলায় পরিবেশবান্ধব ধান চাষ, পরিবর্তিত জলবায়ু মোকাবেলায় ধান গবেষণা and BRRI field mower" have published in the reputed national dailies, Bangladesh.
4. **Evaluator:** Act as a member of tender opening and evaluation committee.
5. **Radio Programme:** "শুটি ইউরিয়া প্রয়োগযন্ত্রের কার্যকারিতা", "বোরো ধানে সেচ ব্যবস্থা", "কৃষি যন্ত্রপাতি রক্ষনাবেক্ষণ কৌশল", "ধানের উৎপাদন বাড়াতে কৃষি যন্ত্রের ব্যবহার", "ধান কর্তোনোত্তর অপচয় কমানোর কৌশল" etc. broadcasted in "Krishi Bisayak Karjakram" program, Bangladesh Betar, Sher-e-bangla Nagar, Dhaka-1207.
6. **Book Review:** "Changing Rural Economy of Bangladesh". Edited by M. A. Sattar Mandal and Published by Bangladesh Economic Association, Dhaka- 1205, Bangladesh



Contribution in technology generation:

As Principal Investigator

Name of the Program	Photograph	How country/farmers/user will be benefited
Feasibility study of solar energy use in agricultural machinery		4 solar panel of each 50 Watt was installed at BRRi automobile workshop roof in series configurations and connected with a battery to store solar energy. Stored energy was used in winnowing paddy at BRRi threshing yard. In other time this energy is used as illumination of four bulbs of each 15 W at BRRi automobile workshop. 600-800 kg paddy can be cleaned in an hour.
Design and development of a PT operated grain cleaner		Air flow rate was found 7 m/s at a linear distance of 1 m and it is decreased to 3 m/s at 5 m from center of flywheel. No foreign matter was observed in cleaned grain during operation. Farmers are also using this type cleaner without safety cover which is very risky. 1200-1600 kg paddy can be cleaned in an hour. Male or female can use this easily.
Assessment of palm oil as fuel in diesel engine		Diesel engine operated by palm oil where CO ₂ emissions were substantially reduced. Palm oil is environmental friendly but not economical
Test and modification of existing tractor mounted scrapper		Modified tractor mounted scrapper can be operated easily with the ordinary tractor. It levels soil well. Leveled field also facilitate the smooth operation of agricultural machines and receives uniform of irrigation throughout the field. As a result uniform growth and ripening of paddy occurred.
Study on Cone penetration resistance (CPR) of BRRi resistance of Rice bed soil	In-situ cone penetration resistance (CPR) of BRRi west byed (clay loam) soil was found from 347.05 to 5605 kN/cm ² depending on moisture content, bulk density etc. For rice bed (clay loam) soil, minimum CPR was found at 22.2% moisture content.	 <p>CPR-dry density-moisture content relationship in 3-D space was developed for a particular soil which enables one to make practical use of cone penetrometer test for soil compaction related studies.</p>
Comparative study on different field mowers'		The average field capacity and field efficiency of the mower were 0.243 ha/hr and 87% respectively. The cutting blade diameter was 80 cm. The forward speed of the field mower was 3.3 km/hr. The cutting height of grass ranged from 4 to 6 cm from the ground surface. The fuel consumption ranged from 0.50 to 0.70 l/hr.

Contribution in technology generation:

As Co- Investigator

Name of the Program	Photograph	How country/farmers/user will be benefited
Modification of reaper travelling wheel for wet-land condition	 <p data-bbox="411 721 877 752">Wet land suited reaper travelling wheel</p>	Reaper can be operated in wet land as well as dry land.
Design, development, and introduction of self-propelled reaper to augment crop production	 <p data-bbox="421 1084 919 1111">Actual view of BRRRI developed self-propelled reaper</p>	It will to adopt the mechanical harvesting so that the timeliness in harvesting operation could be ensured and field losses are minimized to increase yield and land productivity. This will also allow the land to be prepared for the subsequent crops.
Database development for repair and maintenance of BRRRI's farm machineries and automobiles.		Database will help to record, update information about repair and maintenance of vehicles and farm machineries of BRRRI and present the desire data according to the requirement.

Publications: Full paper (14), Bulletins (02), Booklet/Leaflet (02)

A) Full paper as **Principal Author (02)**

1. **Hossain MA**, MA Zami, MAA Mamun, SMM Islam, BK Biswas, 2009, Cone penetration resistance of BRRRI Rice bed soil. *International Journal of Bio Research* 6(2):40-45.
2. **Hossain MA**, S Kabir, MN Islam, MA Haque, and MT Islam, 2009, Processing of green mango by drying and pickling. *Eco-Friendly Agricultural Journal* 2(2): 401-405.

Publications

• Full paper as **Co- Author (12)**

1. Hossen MA, MA Alam, S Paul and **MA Hossain**, 2015, Modification and evaluation of a power weeder for Bangladesh condition, *Eco-Friendly Agricultural Journal* 8(03): 37-46.
2. Zami MA, M Altaf Hossain, AbuSayed, , B K Biswas and **MA Hossain**, 2014, Performance Evaluation of the BRRI Reaper and Chinese Reaper Compared to Manual Harvesting of Rice (*Oryza sativa* L.), *The Agriculturists* 12(2):142-15.
3. Hossain MS, M Ashrafuzzaman, M Iqbal, **MA Hossain** and MF Hoque,2014, A Survey on Poultry Litter Management System in different Poultry Farms of Bangladesh, *International Journal of Bio Research* 16(1): 37-43.
4. Hossain MB, **MA Hossain**, BC Nath, 2014, Feasibility study of Motor and engine driven open drum power thresher. *Eco-Friendly Agricultural Journal* 6(05): 83-92.
5. Sayed Abu, A. F. M Saleh, M. Altaf Hossain, ZA Basunia and **MA Hossain**, 2014, Impact of Lined Canal on Shallow Tubewell Irrigation and Their Acceptability by the Farmers, *The Agriculturists*12(2): 116-125.
6. Ahmed T, **MA Hossain**, MA Sayed, S Wasit and M Hossain, 2014, Preparation of Jelly and Chutney from Sapota (*Achras zapota*), *International Journal of Bio Research* 16(1):7-14.
7. Mamun MAA, KP Halder, MR Monir, **MA Hossain**, MZ Alam and N Akter, 2011, Effect of harvesting time on seed quality of BRRI dhan29. *Eco-Friendly Agricultural Journal* 4(02): 546-549.
8. Ahmed T, M Burhanuddin, MA Hoque, **MA Hossain**, 2011, Preparation of Jam from Sapota (*Achras zapota*), *The Agriculturists* 9(1&2): 1-7.
9. Hasan SMK, **MA Hossain**, MJ Hossain, J Roy, and MSH Sarker, 2010, Preparation of Biscuit from Jackfruit *Artocarpus Heterophyllus* seed flour Blended with Wheat flour, *The Agriculturists* 8(1): 10-18.
10. Helal Uddin M, MM Islam, MSN Mandal, **MA Hossain**, and SMHA Rabbi, 2010, Performance of Two BRRI Varieties of Boro Rice as influenced by Poultry Manure Based Integrated Fertilizer Management, *The Agriculturists* 8(1): 38-46.
11. Rahman MS, MT Islam, **MA Hossain**, MA Alam, and AJ Mridha, 2010, Command Area Development of Shallow tube well by providing different conveyance system, *International Journal of Bio Research* 8(3): 15-21.
12. Haque MA, **MA Hosain**, KMM Rashid, S Wasit and MN Islam, 2009, Study on the effect of vegetable powder on instant fish soup mix, *Eco-Friendly Agricultural Journal* 2(4): 526-530.

B) Bulletins (02)

1. Zami MA, BK Biswas, MAI H, **MA Hossain**, MA Syeed (2013). "BRRI Self-propelled reaper", Bangladesh Rice Research Institute, Gazipur, Bangladesh.
2. Zami MA, BK Biswas, MAI H, **MA Hossain**, Md Kamrul Islam (2013). "Introduction of a newly developed Self-propelled reaper to augment crop production", Bangladesh Rice Research Institute, Gazipur, Bangladesh.

C) Booklet/Leaflet (02): published Bengali and English Booklet/Leaflet on BRRI Self-propelled Reaper

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