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Tapash Kumar Sarkar

Senior Scientific Officer

Grain Quality & Nutrition Division

Bangladesh Rice Research Institute (BRRI), Gazipur-1701 Phone no.: 02-9257401-5 ext 406 (office) and 244 (residence)

Cell no. +88-01716103373 E-mail: tksarkar_engr@yhoo.com



Personal details

Father's name: Parimal Kanti Sarkar Mother's name: Shefali Rani sarkar

Permanent address: Village: Rautra; Post Office: Khazra, Upazila: Assauni and District: Satkhira

Date of birth: 12 September, 1976

Gender: Male

Nationality: Bangladeshi Marital status: Married

Education

Master of Science in Farm Power and Machinery (Ag. Engg.)

Bangladesh Agricultural University (BAU), Mymensingh

Passed in June 2012

Result: First Class (GPA 3.359 out of 4)

Bachelor of Science in Agricultural Engineering

Bangladesh Agricultural University (BAU), Mymensingh

Admission session: 1995-96, Passed in 1999 (Exam. held in 2002)

Result: First Class

Higher Secondary Certificate (Science group)

Govt. Mojid Memorial City College, Khulna under Jessore Board

Passed in 1994 Result: First Division.

Secondary School Certificate (Science group)

KGHF Mowkhali United Academy, Khulna under Jessore Board

Passed in 1992 Result: First division

Employment record

Senior Scientific Officer

Grain Quality & Nutrition Division, BRRI Duration: From 26 November, 2012 to date

Agricultural Engineer (Scientific Officer)

Farm Machinery and Postharvest Technology Division of BRRI Duration: From 01 July, 2006 to 25 November, 2012 (6 years)

Agricultural Engineer (Scientific Officer)

A Govt. Funded project (PAMP project) under Farm Machinery and Postharvest Technology Division of BRRI

Duration: From 30 June, 2004 to 30 June, 2006 (2 year)

Field Engineer

REFPI Project of BAU/DFID

Duration: From 30 January, 2002 to 30 December, 2002 (1 year)

Training received (In country)

Advance Training on Drawing and Design of Agricultural Equipment by AutoCAD

Organized by FMTD project of FMPHT division, BRRI, 2013 (7 days)

Experimental design, layout and statistical analysis

Organized by FMTD project of FMPHT division, BRRI, 2013 (3 days)

Engineering drawing and design of small equipment by AutoCAD tools

Organized by DDMISSRMT project, WMM division, BRRI, 2013 (4 days)

Training on Operation of Laboratory Equipments

Organized by FMTD project of FMPHT division, BRRI, 2013 (3 days)

Agricultural Engineering Technology

Organized by Bangladesh Agricultural Research Institute, 2012 (4 days)

1-Month rice production training

Organized by BRRI, 2010 (1 month)

Research Methodology

Organized by GTI, Mymensingh, Funded by BARC, 2010 (15 days)

Foundation Training Course for NARS Scientists

Organized by BARC-BARD, Comilla, 2009 (04 months)

Training on Solar Drying of Fish

Organized by Department of FPM, BAU under REFFI project, 2002 (03 days)

Training received (Foreign)

Joint study on Rice Milling Technology in Korea

Organized by RDA (Korea)-KOICA jointly, 2012 (60 days)

Rice transplanting Mechanization Technology and maintenance of Rice harvester

Organized by Center of Agriculture Machinery Extension, MOA, P.R., China, 2008 (15 days)

Attended in Workshop

Bridging the rice yield gap for food security

BRRI-DAE workshop organized by BRRI-DAE from 19-21 September, 2006 (03 days)

Strengthening Agricultural Mechanization: Polices and Implementation Strategies National workshop organized by BARC, Dhaka at 11 June 2007 (01 day)

Sterility in Boro rice

National workshop organized by BRRI, Gazipur at 19 April, 2007 (01 day)

Reduction of Post-Harvest Agricultural Crops Losses

CIRDAP Auditorium, Dhaka at 23 November 2009 (1 day)

Agricultural Engineering Future Research Programmes-2009-2010 of NARS Institute Planning workshop organized by BARC, Dhaka at 29 June 2009 (1 day)

Annual Research Review Workshop

Organized by BRRI held on 09-13 February 2014 (01 day)

Minimizing Rice Yield Gap (BRRI Part)

National workshop organized by BRRI on 12 June 2014 (01 day)

Expert Consultation Workshop for the Development of Innovative Research Program in Crop Sector

Planning workshop organized by BARC, Dhaka on 6 June 2015 (01 day)

Dissemination and Adaption of BRRI Developed Technologies in Rice Based Cropping System in Pirojpur-Gopalganj-Bagerhat Region

Planning conference organized by BRRI held on 13 June 2015 at BRRI (01 day)

Farm Machinery Technology Development and Dissemination

Dissemination workshop organized by BRRI held on 4 July 2015 at BRRI (01 day)

Computer literacy

Programming

QBasic Programming & Basic Programming

Package Program

MS-Access, MS Word, Power Point and Excel

Statistical program

MSTAT, SPSS and CropStat

Engineering Program

AutoCAD Engineering

Language & degree of Proficiency

Medium of instruction in Bachelor and Master's level was English

English reading-excellent, speaking-good and writing-good

Membership of professional societies

Member of Krishibid Institution, Bangladesh, Membership No.- (05-99-17110)

Member of Bangladesh Sociaty of Agricultural Engineers, Membership No.- 500

Member of Bangladesh Rice Research Institute Scientists Association

Member of Bangabondhu Krishibid Association

Technology developed

Developed as Principal Investigator

Design and development of Air-blowing rice mill

Seed storage technology

Design and development of updraft gasifier

Developed as Co-Investigator

Design and development of micro flour mill

Design and development of flat bed batch dryer

Design and development of multi crop dryer

Design and development of mobile huller mill

Design and development of upland and lowland weeder

Design and development of hand reaper

Design and development of USG applicator

Paper Published as principal author (National and international journal-4)

TK Sarkar, MA Awal, M Ahiduzzaman, M Akhtaruzzzaman, (2012). Design and development of updraft gasifier: Intl. J. Biores 12(1): 21-30

TK Sarkar, MA Awal, M Ahiduzzaman, M Akhtaruzzzaman, (2012). Evaluation of the Versatile Multi Crop Planter (VMP) to Establishment Chickpea Under Different tillage Practices in Drought Area of Bangladesh: Intl. J. Biores 12(1):31-35

TK Sarkar, AKMS Islam, BC Nath, MA Rahman, MA Hossen and N ferdous (2012). Sensory evaluation of premium quality rice CV BRRI dhan50: Eco-friendly Agril. J. 5(03): 26-28

TK Sarkar, MA Awal, M Ahiduzzaman, M Akhtaruzzzaman, MA Hossen (2012). Evaluation of husk feeded modified updraft gasifier: Eco-friendly Agril. J. 5(06): 61-68

Published as co-author (National and international journal-7)

AKM S Islam, J K Saha, M A Haque and **T K Sarkar** (2006). Repair and Maintenance Cost Model for small Engines used in Agriculture: International J. Eng. Tech 3(1):38-43

MA Hossen, M D Huda, M M R dewan, S A Islam and **T K Sarkar** (2006). Arsenic Test and Removal from Tubewell Water at Control Flow Rate for Drinking Purpose: Intl. J. Sustain. Agril. Tech. 2(5):26-30.

M Kamruzzaman, MM Hossain, MA Hossen, **TK Sarkar** (2008). Performance Study of Rice Husk Briquette Machine: A Case Study in Muktagacha of Mymensingh District, Bangladesh: Intl. J. Biores 5(1): 7-11

MGK Bhuiyan, MA Quasem, **TK Sarkar**, MS Islam, AKMS Islam (2009). Studies on the quality of paddy stored in steel drum, plastic drum, low-cost cocoon and gunny bag: Intl. J. Biores 6(2): 1-6

SMM Rahman, MGK Bhuiyan, MA Rahman, **TK Sarkar** and MR Alam (2010). Performance Evaluation of Micro Rice Mill. Intl. J. Biores 8(1): 43-46

M Kamruzzaman, AKM S Islam, MA Rhaman and **TK Sarkar** (2012). Effect of field drying on head rice recovery and grain breakage of aromatic rice. Intl. J. Biores 12(1): 36-39

MA Hossen, MA Rahman, MGK Bhuyain, **TK Sarkar** and MA Alam (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.

Paper published in the workshop proceedings-1

Islam MS, Rahman SMM, Quasem MA, Huda MD, Islam AKMS, Ahiduzzaman M, Bhuiyan MGK, <u>Hossen MA</u>, 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.

Published bulletins as author and co-author-2

<u>Hossen MA</u>, 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.

Islam M.S., Rahman SMM, Rahman MA, Huda MD, Quasem MA,. Islam AKMS, Ahiduzzaman M, Bhuiyan MGK, <u>Hossen MA</u>, 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.

Published Popular article-2

Krishikotha, sep-Oct., 2008: Ropa Aman dhaner korton projukti, P-42 Bongobondhu, Bangalir ahonkar, Chironjib Mujib, 2011: P-28

Paper presented in KOICA, Korea-1

Rice milling technology in Korea and Bangladesh

Paper presented in BRRI and BAU seminar-2

Design and development of air-blowing rice mill

Design and development of updraft gasifier

Book Review-1

River erosion and consequences to the poor: Echo from grass root

Research Report as Author-7

Popularizing BRRI developed Agricultural Machinery to Augment Mechanized Rice Cultivation in Bangladesh (PAMP/GOB Fund) (2006). Compiled Annual Progress report of PAMP. Report submitted to Project Director, PAMP, FMPHT division, BRRI, Gazipur.

Design and fabrication of Ferro-cement door and window

Quarterly Progress Report of PAMP Regional Office, BRRI, Gazipur

Baseline survey report on farm mechanization of Comilla district

Baseline survey report on farm mechanization of Chittagong district

Baseline survey report on farm mechanization of B. Baria district

Baseline survey report on farm mechanization of Hobigonj district

Half yearly progress report on design and development of updraft gasifier

Annual program report on design and development of updraft gasifier

Annual program report on design and development on air-blowing rice mill

Annual report on energy savings on cooking and parboiling of rice and paddy

Report on prospect and potential of rice bran oil in Bangladesh

Assessment of oil content in bran and chemical composition rice bran oil

Research Report as co-Author-4

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

Baseline survey in farm mechanization, Report #1, Dogori block, Gazipur sadar, Gazipur (2005). Report submitted to Project Director, PAMP, FMPHT division, BRRI, Gazipur.

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.

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.

Paper reviewed-1

Research paper reviewed: Ref: EFAJ-57

Title of the paper: An economic analysis for costing of alternative energy for small scale use

Radio program-2

Repair and maintenance of BRRI-winnower in 2009

Working principle, repair and maintenance of BRRI-open-drum-thresher in 2010

Project Building and execution

Project building

Farm machinery technology development and dessimination (FMTD)

Adaptive research and impact study of BRRI developed agricultural machinery at selected sites of Bangladesh (ARISAM)

Prospect and limitation of quality bran oil production contributing national demand of edible oil in Bangladesh (PLQPE)

Project execution

Popularizing BRRI developed agricultural machinery to augment mechanized rice cultivation in Bangladesh-Executed

Adaptive research and impact study of BRRI developed agricultural machinery at selected sites of Bangladesh (ARISAM) – Executed

Farm machinery technology development and dissemination –Executed

Development of research capacity of the Bangladesh Rice Research Institute -Executed

Nutritious Rice Value Chain (NRVC) Project -Executed

Training conducted-4

Total 08 nos Field demonstration cum informal training conducted as trainee in different places of Rangpur and Dinajpur during the season of Wheat (04 nos) and Boro (04 nos), 2009.

Total 08 nos Field demonstration cum informal training conducted as trainee in different places of Mymeunder and Gazipur during the season of Wheat (04 nos) and Boro (04 nos), 2008

Total 08 nos Field demonstration cum informal training conducted as trainee in different places of Rangpur, Thakurgaon and Dinajpur during the season of Wheat (04 nos) and Boro (04 nos), 2007

Total 04 nos Field demonstration cum informal training conducted as trainee in different places of Mymeunder during the season of Aman, 2005

Member of different committee

Asst. co-ordinator of Gazipur site for demonstration And training program of BRRI machines

Member of BRRI, BARI, DAE project co-ordination, development and execution committee

Member of FMPHT lab. Monitoring, repair and maintenance committee

Member of import/collection of mini combine harvester committee

Member of fuel consumption rate fixation committee, Member of technical committee (BRRI)

Member of field management committee

Member of Technical Evaluation Committee of BRRI

Member of invisilator committee for the post of sub-asst. engineer, lab. tecnician and electracian

Member of evaluation of examination papers for the post of sub-asst. engineer, lab. tecnician and

electracian committee

Member of project technical committee of increasing crop production through farm mechanization(DAE)

Member of investigation committee (BRRI)

Member of manufacturer evaluation committee, Member of technical evaluation committee (DAE)

Miscellaneous

Participated in the seminar on "Solar drying technology development" held on 9th May 2007 at Spectra convention centre, Gulshan-1

Participated in the workshop on "Increasing crop production through farm mechanization" held on 5th June 2010 at AKM Milky Auditorium, Khamarbari, Dhaka

Participated in the seminar on "The role of agricultural engineers in achieving food and nutritional security in Bangladesh" held on 23rd Oct. 2010 at BARC auditorium, Farmgate, Dhaka

Participated in the workshop on "Agricultural engineering research planning" held on 23-24 th May 2011 at BARC auditorium, Farmgate, Dhaka

Participated in the planning workshop on "Minimizing rice yield gap" held on 26 th May 2011 at VIP conference room, BRRI, Gazipur

Participated in the national workshop on "Increasing crop production through farm mechanization" held on 17 May 2012 at BARC auditorium, Farmgate, Dhaka

Participated in the workshop on "Agricultural engineering research planning" held on 11-12 June 2012 at BARC auditorium, Farmgate, Dhaka

Referees

Prof. Dr. Md. Monjurul Alam

Dept. of Farm Power and Machinery

Bangladesh Agricultural University (BAU), Mymensingh-2202

Email: mmalam.bau@gmail.com

Cell no.: +88-015-5243-4796; +88-017-5292-9024

Dr. Kim Young Jung

Advisor

Farm mechanization and postharvest technology Bangladesh Rice Research Institute, Gazipur-1701

Email: <u>yj1885@hanmail.net</u> Cell no.: +88-017-9990-0788

Dr. Muhammad Abdur Rahman

Chief Scientific Officer and Head

Farm Machinery & Postharvest Technology Division Bangladesh Rice Research Institute, Gazipur-1701

Email: abrahman42@yahoo.com

Cell no.:+88-015-5249-5512, +88-017-1196-9573