

M. A. MATIN, PhD

Agricultural Engineer & Rural Development Expert

Mobile: +88 01711875715 | mamatin633@gmail.com | mamatin633@yahoo.com

PROFESSIONAL SUMMARY

Distinguished Agricultural Engineer and Rural Development specialist with over 35 years of progressive leadership at the Rural Development Academy (RDA), Bangladesh. PhD-qualified experts in irrigation engineering, water management, and sustainable rural development. Proven track record directing large-scale national and internationally funded programmed (DFID, FAO/UNDP, GoB), managing multi-million-dollar budgets, and spearheading award-winning innovations in water management, arsenic mitigation, and renewable energy. Recipient of Bangladesh's highest national honors including the Independence Award 2004 and the Bangabandhu National Agricultural Award (Gold Medal).

AWARDS & RECOGNITION

- Independence Award 2004 (Bangladesh's highest national honor) — Lead member of the RDA award-winning team for contributions to buried pipe irrigation and multipurpose deep tubewell (DTW) development.
- Bangabandhu National Agricultural Award 1415 — Gold Medal, the highest national award in agriculture, for developing environment-friendly technology.
- Africa Asia Rural Development Organization (AARDO) Award 2012 — For outstanding contribution in rural development.
- Bogura Padak 2002 — Awarded as Technologist.

PATENTS

- Low-cost DTW (Borehole) technology for multipurpose use.
- Water treatment plant for safe drinking water supply.

KEY INNOVATIONS & MODELS DEVELOPED

- Buried pipe irrigation system — first of its kind in Bangladesh to increase irrigation command area.
- Demand-based low-cost DTW (Borehole) for rural communities.
- Multipurpose use of irrigation water (borehole) for socio-economic development.
- Arsenic filtration plant for safe drinking water through rural piped systems.
- Community-based multi-storied rural housing (PalliJanapad) restoring agricultural land with urban amenities.
- Community bio-gas plant for renewable energy and organic fertilizer production.
- RDA-Credit Model (training-matched micro-finance) for poor rural socio-economic development.
- Two-tier agriculture with solar power irrigation system.
- Graduation from Poverty Model (CLP) for char (river island) dwellers.
- Making Markets Work for the Char (M4C) sustainable market channel development for isolated sandbar communities.

PROFESSIONAL EXPERIENCE

Director General (In-Charge) | Rural Development Academy (RDA), Bogura, Bangladesh

April 2011 – January 2019

- Led administrative, planning, and institutional direction aligned with RDA's rural development mandate.
- Directed research and action research in water management and irrigation.

- Oversaw water treatment plant installation across government and NGO project sites on a pilot basis.
- Provided policy guidance and monitoring across all eight RDA divisions.
- Coordinated Public-Private Partnerships (PPP) with diverse NGOs.
- Organized national and international workshops, seminars, conferences, and training programmes.

Director | Rural Development Academy (RDA), Bogura, Bangladesh

January 2009 – April 2011

- Planned, implemented, monitored, and evaluated multiple development projects.
- Identified operational challenges in irrigation implementation.
- Developed training modules and conducted programmes for government, development stakeholders, and NGOs in irrigation and water resources management.

Additional Director | Rural Development Academy (RDA), Bogura, Bangladesh

April 2007 – January 2009

- Conducted training, research, and action research in rural development, irrigation, water management, and renewable energy.
- Led action research in irrigation engineering: compacted earthen channels, lined channels, and buried pipe systems.
- Installed water treatment plants for domestic, industrial, and agricultural use at multiple GO/NGO organizations.

Director, Centre for Irrigation and Water Management — CIWM (Additional Charge) | Rural Development Academy (RDA), Bogura, Bangladesh

January 2003 – March 2013

- Delivered training and research on rural development, irrigation, water management, and renewable energy for stakeholders from farmers to policy planners.
- Designed and installed water treatment plants for government and NGO project areas.
- Designed technical components of sub-project infrastructure including DTWs, pumps, and bio-gas systems.
- Coordinated with government and NGO bodies for modern technology transfer in agriculture.
- Planned and implemented pilot projects on water management and renewable energy for rural socio-economic development.

Joint Director | Rural Development Academy (RDA), Bogura, Bangladesh

February 1992 – April 2007

- Conducted irrigation management training for officials of BRDB, DAE, BADC, LGED, and international NGOs (DANIDA, CARE, GTZ).
- Active in action research in irrigation engineering including buried pipe systems and domestic water supply from DTWs.
- Installed water treatment plants across GO/NGO organizations including PROSHIKA, BRAC, and REB.

Deputy Director | Rural Development Academy (RDA), Bogura, Bangladesh

March 1987 – February 1992

- Conducted training, research, and action research in rural development and agricultural engineering, focusing on Agri-machinery, irrigation, and water management.

Protocol Officer (Additional Charge) | Rural Development Academy (RDA), Bogura, Bangladesh

1987 – 1992

- Conducted rural development training and research.
- Maintained communications between RDA and partner institutes.
- Managed RDA transport section, hostel, and VIP guesthouses in Bogura and Dhaka.

Assistant Director (Irrigation Engineer) | Command Area Development Project, RDA, Bogura, Bangladesh

October 1983 – March 1987

- Conducted training and research in rural development and irrigation engineering.

Associate Instructor | Rural Development Academy (RDA), Bogura, Bangladesh
December 1986 – October 1993

- Delivered training and research on irrigation and water management for rural development.

CONSULTANCY & PROJECT DIRECTORSHIP

Programme Director — Chars Livelihoods Programme (CLP), DFID/GoB (April 2011 – December 2016)

Budget: Tk. 9,319 million. Directed a programme uplifting the livelihoods of 2 million ultra-poor people across 10 char districts of Bangladesh.

Project Director — Integrated Water Management (IWM), DPA (June 2011 – June 2014)

Budget: Tk. 2.4 million. Developed 78 water management sites across Bangladesh.

Project Director — Irrigation & Water Management Technology Transfer to Southern & Hill Districts, GoB (July 2006 – June 2010)

Budget: Tk. 154.5 million. Covered 15 hill areas of Bangladesh.

Project Director — Employment Creation & Poverty Alleviation through Irrigation, GoB (July 2005 – June 2009)

Budget: Tk. 249.89 million. Developed 51 sites nationally.

Project Director — Arsenic-Free Safe Drinking Water Supply, GoB (July 2001 – June 2005)

Budget: Tk. 96 million. Covered 24 arsenic-affected areas across Bangladesh.

Project Director — Multipurpose Use of Low-Cost DTW for Post-Flood Rehabilitation, GoB (July 1999 – June 2002)

Budget: Tk. 49.63 million. Implemented at 18 sites nationally.

Project Director — Irrigation Technology Transfer Training Project, GoB (July 1994 – June 1999)

Budget: Tk. 24.4 million. Developed 15 minor irrigation sites.

Team Member — Evaluation of IDA Deep Tubewell-II Demonstration Scheme, ODA (1991 – 1992)

Contributed to evaluation of deep tubewell demonstration schemes.

Team Member — Feasibility of Domestic Water Supply from Irrigation DTW, UNCDF (1989)

Assessed feasibility of domestic water supply from irrigation tubewells.

Irrigation Engineer (RDA) — Irrigation Management Project (IMP), FAO/UNDP (BGD/83/013) (1983 – 1987)

Served as irrigation engineer for the FAO/UNDP-funded irrigation management project.

Training Officer (Tube-well) — Command Area Development Project, FAO/UNDP (BGD/80/001) (1982 – 1983)

Delivered training on tubewell operation under the FAO/UNDP command area development project.

SELECTED RESEARCH PUBLICATIONS (32 TOTAL)

1. Matin, M.A. (1982). Evaluation of Aquifer Characteristics of Bogura District. BAU, Mymensingh.
2. Matin, M.A. & Arif, M.T. (1984). Precast Cement Concrete Slab Lined Channel: A High Quality-Low-Cost Channel Technology for Irrigation. RDA Annual Report 1983-84.
3. Hossain, A. & Matin, M.A. (1984). Low-Cost Lined Channel for Small Scale Irrigation Project. RDA, Bogura.
4. Matin, M.A. & Khan, M.N.I. (1988). The Impact of Compacted Earth Irrigation Channel. Bangladesh Rural Development Studies, Vol. 1, No. 1. RDA, Bogura.
5. Matin, M.A. & others (1992). Evaluation of IDA Deep Tubewell-II Demonstration Schemes. Final Report to Mott MacDonald International, Dhaka.
6. Matin, M.A. et al. (1997). Safe Drinking Water Supply for Rural Community: An Alternative Technological Option of Using DTW. Proceedings, Joint International Conference on Agricultural Engineering & Technology, Dhaka.

7. Matin, M.A. & Khan, M.N.I. (1998). Low-Cost DTW (Borehole) with Appropriate Filtration Plant for Quality Drinking Water Supply (Arsenic Free). RDA, Bogura.
8. Matin, M.A. et al. (2000). RDA Developed Low-Cost DTW (Borehole) Technology for Multipurpose Uses — Performance Evaluation. RDA, Bogura.
9. Matin, M.A. & Mridha, M.A.H. (2010). Current Situation and Strategies of Solid Waste Management in Bangladesh. RDA Journal, Vol-XIII, No-1.
10. Matin, M.A. et al. (2013). Multi-storied Agriculture with Solar Power Irrigation: A Feasibility Study at RDA Demonstration Farm. Bangladesh Journal of Agricultural Engineering, Vol. 24(1&2), pp. 63-71.
11. Matin, M.A. et al. (2013). Impact of RDA-developed Multipurpose Use of Deep Tubewell Projects on Rural Livelihood Improvement. Bangladesh Journal of Agricultural Engineering, Vol. 24(1&2), pp. 37-43.
12. Matin, M.A. et al. (2017). Community-based Multi-Storied Rural Housing (PalliJanapad): A Green Innovation for Sustainable Rural Development. RDA Journal, Vol-XX, No-1.
13. Matin, M.A. et al. (2018). Urban Storm Water Management and Mitigation of Water Logging in RDA Campus. RDA Journal, Vol-XXII, No-1.
14. Alam, M.M., Matin, M.A. et al. (2018). Opportunities and Constraints on Manufacturing Agricultural Machinery in Bangladesh-2017. RDA, Bogura.

Note: Full list of 32 publications available upon request.

SELECTED INTERNATIONAL ENGAGEMENTS

- Climate Forecasting for Risk Management Workshop — Kuala Lumpur, Malaysia (2012)
- AARDO 17th General Session & 50th Anniversary — Republic of Egypt (2012)
- South Asia Regional Conference on Rural Water Supply & Sanitation — Nepal (2012)
- IDB Group Annual Meeting Innovation Exhibition — Tajikistan (2013)
- International Conference on Graduation and Social Protection — Kigali, Rwanda (2014)
- Policy Level Interaction & Study Programme — United States of America (2014)
- AARDO 18th General Session & Executive Committee Meetings — Mauritius (2015)
- D-8 Workshop on Rural Development Policies — Ankara, Turkey (2015)
- CIRDAP Executive Committee & Regional Policy Dialogue — Nadi, Fiji (2015)
- 3rd Regional Forum on Sustainable Agricultural Mechanization — Manila, Philippines (2015)
- High-Level Dialogue on Biogas Development in Asia — China (2016)
- International Conference on Marginalisation, Poverty and Decentralisation — India (2016)
- Rural Invest Practitioners Knowledge Sharing Workshop — Rome, Italy (2017)
- AARDO Technical Programme Committee Meeting — Khartoum, Sudan (2017)
- International Symposium on Village Democracy, Autonomy and Prosperity — Jakarta, Indonesia (2017)

EDUCATION

PhD in Environmental Science — Bangladesh Agricultural University (BAU), Mymensingh, Bangladesh

MSc in Irrigation Engineering — Cranfield University (Silsoe College), UK (1990)

Specialization: Irrigation Engineering, Drainage, Irrigation System Design

BSc (Hons.) in Agricultural Engineering — Bangladesh Agricultural University (BAU), Mymensingh (1982)

Major: Irrigation & Water Management, Hydraulic Engineering, Pump & Tubewell Technology

PROFESSIONAL MEMBERSHIPS

- Fellow-Member — Institution of Engineers, Bangladesh
- Life Member — Society of Agricultural Engineers, Bangladesh
- Member — Krishibid Institution, Bangladesh
- Founder Member — Centre for Irrigation and Water Management (CIWM), RDA, Bogura

LANGUAGE PROFICIENCY

English — Spoken: Fluent | Reading: Excellent | Writing: Excellent

Bangla (Bengali) — Spoken: Fluent | Reading: Excellent | Writing: Excellent

M. A. MATIN, PhD

Date: _____