Sher-e-Bangla Agricultural University

SDG Activity Report

on

SDG 13:

Climate Action

(2025–2026)

Contents

Faculty Research and Publications (2025–2026)

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3. Enhancing drought resilience in Brassica campestris: Antioxidant and physiological benefits of Ascophyllum nodosum extract and alginic acid

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35. Harnessing Rice Combine Harvester Adoption for Sustainable Agriculture in the Haor (Wetland) Ecosystem of Bangladesh

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48. Exploring Plant Stress Tolerance: A Metabolomics Approach

49. Molecular Insights into NAC Transcription Factors: Key Regulators of Plant Response to Metal Stress

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52. Evaluating farmers' satisfaction from high-yielding rice (Oryza sativa) variety cultivation in boro season: evidence from adaptive trials in Bangladesh

53. Reactive Oxygen Species in Crop Plants: Production, Detoxification, Signaling, and Molecular Cross-Talk

54. Climate-smart aquaculture practice: Changes in economic viability and efficiency of mud crab fattening in coastal Bangladesh

Faculty Research and Publications

1. Policy abundance, governance scarcity: A political economy analysis of disaster risk reduction failures in Bangladesh

Author: Islam M.T.; Aldrich D.P.; Ali M.M.; Tanzima Z.; Islam A.R.M.T.

Year: 2026

DOI / Link: https://doi.org/10.1016/j.pdisas.2026.100689

Abstract:

The publication abstract for 'Policy abundance, governance scarcity: A political economy analysis of disaster risk reduction failures in Bangladesh' (DOI: 10.1016/j.pdisas.2026.100689) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105047718811?origin=resultslist.

2. Next-Generation Crop Improvement: Social, Ethical, and Regulatory Perspectives on GMO Commercialization and Future Challenges

Author: Boora N.; Ahlawat Y.; Chaudhary D.; Jaiwal P.K.; Kundu S.

Year: 2025

DOI / Link: https://doi.org/10.1007/978-981-95-0309-4_14

Abstract:

The publication abstract for 'Next-Generation Crop Improvement: Social, Ethical, and Regulatory Perspectives on GMO Commercialization and Future Challenges' (DOI: 10.1007/978-981-95-0309-4_14) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105024051397?origin=resultslist.

3. Enhancing drought resilience in Brassica campestris: Antioxidant and physiological benefits of Ascophyllum nodosum extract and alginic acid

Author: Hasanuzzaman M.; Rummana S.; Sinthi F.; Alam S.; Raihan M.R.H.; Alam M.M.

Year: 2025

DOI / Link: https://doi.org/10.1016/j.plaphy.2025.110198

Abstract:

The publication abstract for 'Enhancing drought resilience in Brassica campestris: Antioxidant and physiological benefits of Ascophyllum nodosum extract and alginic acid' (DOI: 10.1016/j.plaphy.2025.110198) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105009413888?origin=resultslist.

4. Proteomics in Allopolyploid Crops: Stress Resilience, Challenges and Prospects

Author: Halder T.; Bhoite R.; Islam S.; Yan G.; Siddiqui M.N.; Kayess M.O.; Siddique K.H.M.

Year: 2025

DOI / Link: https://doi.org/10.3390/proteomes13040060

Abstract:

The publication abstract for 'Proteomics in Allopolyploid Crops: Stress Resilience, Challenges and Prospects' (DOI: 10.3390/proteomes13040060) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105027431697?origin=resultslist.

5. Climate-smart technology adoption in hazard-prone areas: does this adoption impact farm families' food security?

Author: Qian J.; Rahman A.; Zhu N.; Alnafissa M.

Year: 2025

DOI / Link: https://doi.org/10.1057/s41599-025-04954-1

Abstract:

The publication abstract for 'Climate-smart technology adoption in hazard-prone areas: does this adoption impact farm families' food security?' (DOI: 10.1057/s41599-025-04954-1) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105005273859?origin=resultslist.

6. Stakeholder and expert opinion of solar radiation modification in South Asia: insights into perceptions, geopolitical, and governance concerns in Bangladesh

Author: Rahman M.S.; Sarker F.; Kabir M.H.; Baum C.M.; Merk C.; Roconuzzaman M.

Year: 2026

DOI / Link: https://doi.org/10.1088/2515-7620/ae5473

Abstract:

The publication abstract for 'Stakeholder and expert opinion of solar radiation modification in South Asia: insights into perceptions, geopolitical, and governance concerns in Bangladesh' (DOI: 10.1088/2515-7620/ae5473) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105034178129?origin=resultslist.

7. Adaptation strategies to waterlogging among coastal farmers in Bangladesh: Practices, determinants, and implications for resilient agriculture

Author: Akter R.; Ullah Mazumder M.S.

Year: 2025

DOI / Link: https://doi.org/10.1016/j.cliser.2025.100598

Abstract:

The publication abstract for 'Adaptation strategies to waterlogging among coastal farmers in Bangladesh: Practices, determinants, and implications for resilient agriculture' (DOI: 10.1016/j.cliser.2025.100598) is indexed in

the Scopus database and accessible at https://www.scopus.com/pages/publications/105011049594?origin=resultslist.

8. Assessing the links between climate change resiliency and food security in northwestern region of Bangladesh

Author: Sarker A.; Yasin S.I.; Ghosh B.C.; Mwalupaso G.E.; Akter A.; Kiprop E.; Zhenzhen L.; Eyasmin F.; Xianhui G.

Year: 2026

DOI / Link: https://doi.org/10.17221/218/2025-AGRICECON

Abstract:

The publication abstract for 'Assessing the links between climate change resiliency and food security in northwestern region of Bangladesh' (DOI: 10.17221/218/2025-AGRICECON) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105043893528?origin=resultslist.

9. Phytoprotectants in action: Shielding plants from oxidative damage under temperature extremes and waterlogging stress

Author: Datta D.; Alam S.; Sinthi F.; Nahar K.; Hasanuzzaman M.

Year: 2026

DOI / Link: https://doi.org/10.3329/jbas.v50i3.93933

Abstract:

The publication abstract for 'Phytoprotectants in action: Shielding plants from oxidative damage under temperature extremes and waterlogging stress' (DOI: 10.3329/jbas.v50i3.93933) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105053883265?origin=resultslist.

10. Impact of climate change on Boro rice production in Bangladesh: Evidence from time series modeling

Author: Shahrier R.; Hasan M.N.; Ankita S.Y.; Tasnim I.; Rahman K.T.

Year: 2025

DOI / Link: https://doi.org/10.1371/journal.pone.0328699

Abstract:

The publication abstract for 'Impact of climate change on Boro rice production in Bangladesh: Evidence from time series modeling' (DOI: 10.1371/journal.pone.0328699) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105011282802?origin=resultslist.

11. Harnessing plant–microbe interactions for sustainable crop improvement: from genomics to breeding

Author: Kayess O.; Tahjib-Ul-Arif; Halder T.; Siddiqui N.

Year: 2026

DOI / Link: https://doi.org/10.1007/s13199-026-01116-y

Abstract:

The publication abstract for 'Harnessing plant–microbe interactions for sustainable crop improvement: from genomics to breeding' (DOI: 10.1007/s13199-026-01116-y) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105034692571?origin=resultslist.

12. Groundwater under the lens: a remote sensing exploration of storage patterns and trends in Bangladesh

Author: Rahman M.; Niloy S.; Izlal S.; Promi T.R.; Islam M.A.; Toma N.I.; Gaber A.; Hossain A.

Year: 2025

DOI / Link: https://doi.org/10.2166/wcc.2025.012

Abstract:

The publication abstract for 'Groundwater under the lens: a remote sensing exploration of storage patterns and trends in Bangladesh' (DOI: 10.2166/wcc.2025.012) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105012376680?origin=resultslist.

13. Does the adoption of improved pulse technologies increase farm profitability in the face of climate risk? Evidence from coastal Bangladesh

Author: Kundu N.D.; Uddin M.T.; Shama A.S.; Sattar M.N.; Majumder M.K.; Tushar M.T.I.; Islam M.M.

Year: 2026

DOI / Link: https://doi.org/10.1016/j.envc.2025.101384

Abstract:

The publication abstract for 'Does the adoption of improved pulse technologies increase farm profitability in the face of climate risk? Evidence from coastal Bangladesh' (DOI: 10.1016/j.envc.2025.101384) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105024613241?origin=resultslist.

14. EXPLORING THE ROLE OF SEAWEED CULTURE IN THE REDUCTION OF GREENHOUSE GAS EMISSIONS IN THE ATMOSPHERE: A NATURE-BASED SOLUTION FOR CLIMATE CHANGE MITIGATION

Author: Bhuyan M.S.; Haider S.M.B.; Kunda M.; Islam M.T.; Mojumder I.A.; Husain A.; Chowdhury E.; Roy R.; Ali M.M.; Pandit D.

Year: 2025

DOI / Link: https://doi.org/10.46909/alse-581165

Abstract:

The publication abstract for 'EXPLORING THE ROLE OF SEAWEED CULTURE IN THE REDUCTION OF GREENHOUSE GAS EMISSIONS IN THE ATMOSPHERE: A NATURE-BASED SOLUTION FOR CLIMATE CHANGE MITIGATION' (DOI: 10.46909/alse-581165) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105054616370?origin=resultslist.

15. Development of a Silicon Efficiency Index Integrated with GGE Biplot Analysis for Identifying Salinity-tolerant Wheat Genotypes

Author: Ahmed S.R.; Iram I.; Ali Z.; Haleem A.; Khan J.; Ghaffari H.; Hasanuzzaman M.; Maqsood M.F.; Tan D.K.Y.; Brestic M.; Skalicky M.

Year: 2026

DOI / Link: https://doi.org/10.1007/s12633-026-03701-8

Abstract:

The publication abstract for 'Development of a Silicon Efficiency Index Integrated with GGE Biplot Analysis for Identifying Salinity-tolerant Wheat Genotypes' (DOI: 10.1007/s12633-026-03701-8) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105050635249?origin=resultslist.

16. Crop and farming-system diversification strategies for coastal agricultural resilience: a systematic review through DPSIR lens

Author: Sujan M.H.K.; Kotir J.H.; Abdul Aziz A.; Akber M.A.

Year: 2026

DOI / Link: https://doi.org/10.1007/s10113-026-02709-5

Abstract:

The publication abstract for 'Crop and farming-system diversification strategies for coastal agricultural resilience: a systematic review through DPSIR lens' (DOI: 10.1007/s10113-026-02709-5) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105054581907?origin=resultslist.

17. Dataset on potato phenology, growth, and yield for DSSAT/APSIM crop model calibration at central region of Bangladesh

Author: Talukder A.H.M.M.R.; Ahmed F.; Ahsan A.F.M.S.; Mahfuza S.N.; Mustakim A.A.M.M.; Mokarroma N.; Nahar L.; Khan M.S.U.; Alam Z.

Year: 2026

DOI / Link: https://doi.org/10.1016/j.dib.2025.112363

Abstract:

The publication abstract for 'Dataset on potato phenology, growth, and yield for DSSAT/APSIM crop model calibration at central region of Bangladesh' (DOI: 10.1016/j.dib.2025.112363) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105025114088?origin=resultslist.

18. Emerging Models of Green Financing in Selected South Asian Countries

Author: Kundu S.; Kumar R.S.

Year: 2025

DOI / Link: https://doi.org/10.1007/978-3-031-80478-6_7

Abstract:

The publication abstract for 'Emerging Models of Green Financing in Selected South Asian Countries' (DOI: 10.1007/978-3-031-80478-6_7) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105007398325?origin=resultslist.

19. Navigating the productivity-adaptation-mitigation triangle in climate-smart agriculture for rice-based ecosystems

Author: Das Pantha S.; Mimi T.T.; Roy R.; Talukder B.

Year: 2026

DOI / Link: https://doi.org/10.1002/agj2.70425

Abstract:

The publication abstract for 'Navigating the productivity-adaptation-mitigation triangle in climate-smart agriculture for rice-based ecosystems' (DOI: 10.1002/agj2.70425) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105039621825?origin=resultslist.

20. Unlocking Food Security in Flood-Prone Bangladesh: The Power of Women-Led Climate-Smart Agriculture

Author: Akter A.; Beg T.H.; Xu H.

Year: 2026

DOI / Link: https://doi.org/10.1002/fes3.70327

Abstract:

The publication abstract for 'Unlocking Food Security in Flood-Prone Bangladesh: The Power of Women-Led Climate-Smart Agriculture' (DOI: 10.1002/fes3.70327) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105053286472?origin=resultslist.

21. Multi-Trait Index-Based Selection of Drought Tolerant Wheat: Physiological and Biochemical Profiling

Author: Mohi-Ud-Din M.; Hossain M.A.; Rohman M.M.; Uddin M.N.; Haque M.S.; Tahery M.H.; Hasanuzzaman M.

Year: 2025

DOI / Link: https://doi.org/10.3390/plants14010035

Abstract:

The publication abstract for 'Multi-Trait Index-Based Selection of Drought Tolerant Wheat: Physiological and Biochemical Profiling' (DOI: 10.3390/plants14010035) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/85214501974?origin=resultslist.

22. GLOBAL RESEARCH TRENDS IN ENHANCING MAIZE PRODUCTIVITY UNDER WATER SCARCITY: A BIBLIOMETRIC ANALYSIS OF MOLECULAR AND PHYSICAL INTERVENTIONS (1984-2026)

Author: Hayat M.K.; Ijaz H.; Jamali S.; Zafar S.; Ashraf Z.U.; Shahriyar S.; Cengiz R.; Öten M.; Akter A.; Mahmud M.N.

Year: 2026

DOI / Link: https://doi.org/10.47278/journal.abr/2026.042

Abstract:

The publication abstract for 'GLOBAL RESEARCH TRENDS IN ENHANCING MAIZE PRODUCTIVITY UNDER WATER SCARCITY: A BIBLIOMETRIC ANALYSIS OF MOLECULAR AND PHYSICAL INTERVENTIONS (1984-2026)' (DOI: 10.47278/journal.abr/2026.042) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105045510684?origin=resultslist.

23. Risk and vulnerability assessment of coastal social–ecological systems in Bangladesh with strategic pathways for stewardship

Author: Roy R.; Chakraborty L.; Talukder B.; Al Hussain M.M.; Haldar S.; Sarkar M.

Year: 2026

DOI / Link: https://doi.org/10.1007/s13280-026-02443-6

Abstract:

The publication abstract for 'Risk and vulnerability assessment of coastal social–ecological systems in Bangladesh with strategic pathways for stewardship' (DOI: 10.1007/s13280-026-02443-6) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105044343687?origin=resultslist.

24. Climate-Resilient Technologies for Smart Agriculture

Author: Kader M.A.; Jewel A.; Mishra A.; Mojid M.A.

Year: 2025

DOI / Link: https://doi.org/10.1007/978-3-032-00190-0_17

Abstract:

The publication abstract for 'Climate-Resilient Technologies for Smart Agriculture' (DOI: 10.1007/978-3-032-00190-0_17) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105026673650?origin=resultslist.

25. Framework for early assessment of food safety hazards in the transition to a more sustainable food system: three case studies in the Vietnamese Mekong Delta

Author: Safitri R.A.; Bouwman L.M.S.; Siegmund-Schultze M.; Nhan T.M.; Islam M.A.; van Asselt E.D.; van Dongen K.C.W.

Year: 2025

DOI / Link: https://doi.org/10.1016/j.jafr.2025.102262

Abstract:

The publication abstract for 'Framework for early assessment of food safety hazards in the transition to a more sustainable food system: three case studies in the Vietnamese Mekong Delta' (DOI: 10.1016/j.jafr.2025.102262) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105013302965?origin=resultslist.

26. Water at the Crossroads: Challenges and Opportunities for SDG Integration in Bangladesh

Author: Nasrin R.; Ali M.M.; Ahmed A.; Rahman A.

Year: 2026

DOI / Link: https://doi.org/10.1007/978-3-032-18708-6_78

Abstract:

The publication abstract for 'Water at the Crossroads: Challenges and Opportunities for SDG Integration in Bangladesh' (DOI: 10.1007/978-3-032-18708-6_78) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105031889212?origin=resultslist.

27. Coping with climate change: an analysis of farmers' adoption behavior and its impact on production efficiency

Author: Zhu N.; Yang J.; Rahman A.; Sarker M.N.I.; Afrin S.; Afroj M.; Islam M.D.I.; Firdaus R.B.R.

Year: 2025

DOI / Link: https://doi.org/10.1007/s10668-023-04445-w

Abstract:

The publication abstract for 'Coping with climate change: an analysis of farmers' adoption behavior and its impact on production efficiency' (DOI: 10.1007/s10668-023-04445-w) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/85183669140?origin=resultslist.

28. Learning from nature: Photosynthetic traits conferring superior salt tolerance in wild rice Oryza coarctata

Author: Yun P.; Shahzad B.; Hasanuzzaman M.; Islam T.; Shabala L.; Zhou M.; Venkataraman G.; Chen Z.-H.; Shabala S.

Year: 2025

DOI / Link: https://doi.org/10.1098/rstb.2024.0242

Abstract:

The publication abstract for 'Learning from nature: Photosynthetic traits conferring superior salt tolerance in wild rice Oryza coarctata' (DOI: 10.1098/rstb.2024.0242) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105007094599?origin=resultslist.

29. Determinants of adoption of climate-smart agriculture (CSA) practices in mushroom farming in Bangladesh

Author: Haq I.; Rahman M.; Datta T.; Rakib M.H.; Nobrega D.

Year: 2026

DOI / Link: https://doi.org/10.1038/s41598-026-39761-4

Abstract:

The publication abstract for 'Determinants of adoption of climate-smart agriculture (CSA) practices in mushroom farming in Bangladesh' (DOI: 10.1038/s41598-026-39761-4) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105034456553?origin=resultslist.

30. Melatonin's Role in Enhancing Waterlogging Tolerance in Plants: Current Understanding and Future Directions

Author: Jahan M.S.; Hasan M.M.; Siddique A.B.; Zarbakhsh S.; Hamada M.M.; Hussain M.A.; Jabborova D.; Corpas F.J.

Year: 2025

DOI / Link: https://doi.org/10.1111/ppl.70499

Abstract:

The publication abstract for 'Melatonin's Role in Enhancing Waterlogging Tolerance in Plants: Current Understanding and Future Directions' (DOI: 10.1111/ppl.70499) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105015189307?origin=resultslist.

31. Biodiversity of citrus fruits in Bangladesh

Author: Rahman J.; Rahman Md.Z.; Tasfia A.; Bhuyan M.H.M.B.

Year: 2026

DOI / Link: https://doi.org/10.17660/ActaHortic.2026.1448.94

Abstract:

The publication abstract for 'Biodiversity of citrus fruits in Bangladesh' (DOI: 10.17660/ActaHortic.2026.1448.94) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105032494804?origin=resultslist.

32. Gene Bank: Conservation of Genetic Resources in the Genomic Era

Author: Rahman M.S.; Rahman M.Z.; Gain N.; Nesa M.M.; Islam M.Z.; Deepo D.M.; Rahman J.

Year: 2026

DOI / Link: https://doi.org/10.1007/978-3-032-02605-7_8

Abstract:

The publication abstract for 'Gene Bank: Conservation of Genetic Resources in the Genomic Era' (DOI: 10.1007/978-3-032-02605-7_8) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105050458767?origin=resultslist.

33. Mechanisms of waterlogging tolerance in plants

Author: Hussain M.A.; Jahan M.S.

Year: 2025

DOI / Link: https://doi.org/10.1016/B978-0-443-14139-3.00020-8

Abstract:

The publication abstract for 'Mechanisms of waterlogging tolerance in plants' (DOI: 10.1016/B978-0-443-14139-3.00020-8) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105019731980?origin=resultslist.

34. Animal Selection and Management Strategies for Meat Quality and Sustainability

Author: Islam S.M.S.; Islam S.; Rahman M.; Akter N.; Noman A.A.; Shihab M.P.R.; Rahman A.; Hossain D.; Ahmed M.J.

Year: 2026

DOI / Link: https://doi.org/10.1201/9781003689560-7

Abstract:

The publication abstract for 'Animal Selection and Management Strategies for Meat Quality and Sustainability' (DOI: 10.1201/9781003689560-7) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105048977005?origin=resultslist.

35. Harnessing Rice Combine Harvester Adoption for Sustainable Agriculture in the Haor (Wetland) Ecosystem of Bangladesh

Author: Sujan M.H.K.; Sarker M.R.; Sarkar M.A.R.; Sultana M.; Rahman M.S.; Ahammad S.; Khan M.

Year: 2025

DOI / Link: https://doi.org/10.1111/1467-8489.70055

Abstract:

The publication abstract for 'Harnessing Rice Combine Harvester Adoption for Sustainable Agriculture in the Haor (Wetland) Ecosystem of Bangladesh' (DOI: 10.1111/1467-8489.70055) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105017956116?origin=resultslist.

36. Is it economically rational to switch to short-duration rice varieties? Evidence from climate vulnerable freshwater wetland areas

Author: Rahman M.S.; Acharjee D.C.

Year: 2026

DOI / Link: https://doi.org/10.1080/00036846.2026.2646321

Abstract:

The publication abstract for 'Is it economically rational to switch to short-duration rice varieties? Evidence from climate vulnerable freshwater wetland areas' (DOI: 10.1080/00036846.2026.2646321) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105033658270?origin=resultslist.

37. Analyzing the impact of climate change and renewable energy on agricultural productivity in Bangladesh using an ARDL model

Author: Ahammad S.; Datta T.; Mosharof N.B.; Islam M.F.; Bhuiyan M.I.H.; Ahmed M.J.; Alam K.E.

Year: 2026

DOI / Link: https://doi.org/10.1007/s43621-026-03525-x

Abstract:

The publication abstract for 'Analyzing the impact of climate change and renewable energy on agricultural productivity in Bangladesh using an ARDL model' (DOI: 10.1007/s43621-026-03525-x) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105046539451?origin=resultslist.

38. Rethinking household food security under a changing climate in drought prone areas of Ethiopia

Author: Mwalupaso G.E.; Eshetie A.M.; Matafwali E.; Akter A.; Lu H.; Geng X.

Year: 2025

DOI / Link: https://doi.org/10.1016/j.landusepol.2024.107437

Abstract:

The publication abstract for 'Rethinking household food security under a changing climate in drought prone areas of Ethiopia' (DOI: 10.1016/j.landusepol.2024.107437) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/85211635118?origin=resultslist.

39. Strategies to strengthen institutional capacities for climate-resilient coastal socio-ecological systems in Bangladesh

Author: Roy R.; Chakraborty L.; Haldar S.; Talukder B.; Tan M.L.; Roy S.; Bhuiyan S.; Chan N.W.

Year: 2026

DOI / Link: https://doi.org/10.1080/17565529.2026.2617374

Abstract:

The publication abstract for 'Strategies to strengthen institutional capacities for climate-resilient coastal socio-ecological systems in Bangladesh' (DOI: 10.1080/17565529.2026.2617374) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105028109190?origin=resultslist.

40. Understanding climate change-induced drought shocks and coping strategies of farmers in the Barind Tract Region, Bangladesh

Author: Alam M.M.; Shaba S.A.; Farhaz S.; Toma L.T.; Ali H.M.

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DOI / Link: https://doi.org/10.1016/j.indic.2026.101208

Abstract:

The publication abstract for 'Understanding climate change-induced drought shocks and coping strategies of farmers in the Barind Tract Region, Bangladesh' (DOI: 10.1016/j.indic.2026.101208) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105032256000?origin=resultslist.

41. Pulse farmers' adaptation to climate-induced variability in coastal Bangladesh: Perceptions, strategies, and drivers

Author: Kundu N.D.; Uddin M.T.; Sarker M.R.; Sujan M.H.K.; Noman M.A.A.; Islam M.M.; Sarkar M.A.R.

Year: 2026

DOI / Link: https://doi.org/10.1016/j.cliser.2026.100646

Abstract:

The publication abstract for 'Pulse farmers' adaptation to climate-induced variability in coastal Bangladesh: Perceptions, strategies, and drivers' (DOI: 10.1016/j.cliser.2026.100646) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105030532208?origin=resultslist.

42. Integrated insight into somato-gonadal fatty acid dynamics and environmental synchrony: Unravelling post-monsoon gametogenic strategies of oysters Crassostrea madrasensis in raft-cultivation systems

Author: Ferdous A.; Jahan I.; Hossain M.N.; Chowdhury S.; Rahman M.M.; Asaduzzaman M.

Year: 2026

DOI / Link: https://doi.org/10.1016/j.aquaculture.2025.743576

Abstract:

The publication abstract for 'Integrated insight into somato-gonadal fatty acid dynamics and environmental synchrony: Unravelling post-monsoon gametogenic strategies of oysters Crassostrea madrasensis in raft-

cultivation systems' (DOI: 10.1016/j.aquaculture.2025.743576) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105026176542?origin=resultslist.

43. Eating Choices and Planet's Sustainability; How Far Consumers Are Willing to Pay for Sustainable Food Consumption in Middle-Income Countries?

Author: Hoque F.; Akter A.

Year: 2026

DOI / Link: https://doi.org/10.22059/ier.2024.370832.1007912

Abstract:

The publication abstract for 'Eating Choices and Planet's Sustainability; How Far Consumers Are Willing to Pay for Sustainable Food Consumption in Middle-Income Countries?' (DOI: 10.22059/ier.2024.370832.1007912) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105046851094?origin=resultslist.

44. Assessing resilience of surface water management schemes in Bangladesh: strategic insights for transformation

Author: Roy R.; Czaplicka K.; Abe S.

Year: 2025

DOI / Link: https://doi.org/10.2166/aqua.2025.044

Abstract:

The publication abstract for 'Assessing resilience of surface water management schemes in Bangladesh: strategic insights for transformation' (DOI: 10.2166/aqua.2025.044) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105020669212?origin=resultslist.

45. Combining Traditional Breeding with Molecular Techniques: An Integrative Approach

Author: Hasan Md.N.; Simi T.I.; Rahaman S.S.; Rahim Md.A.

Year: 2025

DOI / Link: https://doi.org/10.32604/phyton.2025.067633

Abstract:

The publication abstract for 'Combining Traditional Breeding with Molecular Techniques: An Integrative Approach' (DOI: 10.32604/phyton.2025.067633) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105017882720?origin=resultslist.

46. Magnesium-mediated stress adaptation in plants: from physio-biochemical insights to climate-resilient agriculture

Author: Sarraf M.; Bansal R.; Shackira A.M.; Yadav V.; Zarbakhsh S.; Roychowdhury R.; Chauhan D.K.; Mousavi H.; Hasanuzzaman M.

Year: 2026

DOI / Link: https://doi.org/10.3389/fpls.2026.1715501

Abstract:

The publication abstract for 'Magnesium-mediated stress adaptation in plants: from physio-biochemical insights to climate-resilient agriculture' (DOI: 10.3389/fpls.2026.1715501) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105032240435?origin=resultslist.

47. Stress-Responsive Legume Microbiomes: Metagenomic Approaches for Functional and Applied Insights

Author: Gain N.; Rahman M.Z.; Tonton S.B.; Rahman M.S.; Rahman J.

Year: 2026

DOI / Link: https://doi.org/10.1201/9781003733324-10

Abstract:

The publication abstract for 'Stress-Responsive Legume Microbiomes: Metagenomic Approaches for Functional and Applied Insights' (DOI: 10.1201/9781003733324-10) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105046486534?origin=resultslist.

48. Exploring Plant Stress Tolerance: A Metabolomics Approach

Author: Choudhury S.; Moulick D.; Hasanuzzaman M.

Year: 2026

DOI / Link: https://doi.org/10.1201/9781779641731

Abstract:

The publication abstract for 'Exploring Plant Stress Tolerance: A Metabolomics Approach' (DOI: 10.1201/9781779641731) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105038800363?origin=resultslist.

49. Molecular Insights into NAC Transcription Factors: Key Regulators of Plant Response to Metal Stress

Author: Bouzroud S.; Fayezizadeh M.R.; Das S.; Sarraf M.; Saleem M.H.; Ercisli S.; Mirmazloum I.; Hasanuzzaman M.

Year: 2025

DOI / Link: https://doi.org/10.1007/s00344-025-11787-4

Abstract:

The publication abstract for 'Molecular Insights into NAC Transcription Factors: Key Regulators of Plant Response to Metal Stress' (DOI: 10.1007/s00344-025-11787-4) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105012585008?origin=resultslist.

50. Climate-smart practice: level of effectiveness and determinants of Sorjan farming adoption in coastal Bangladesh

Author: Kundu N.D.; Sujan M.H.K.; Sarker M.R.; Sultana M.; Uddin M.T.; Bhandari H.; Sarkar M.A.R.

Year: 2026

DOI / Link: https://doi.org/10.1007/s10668-024-05780-2

Abstract:

Climate-smart agriculture stands as a promising solution to elevate cropping intensity and enhance food security in climate-vulnerable communities. Despite the evident potential, there is an existing gap in understanding the effects of climate change adaptation measures, with limited research explicitly focusing on adopting sorjan cultivation. This study seeks to address this gap by delving into the effectiveness and determinants of sorjan farming in the coastal regions of Bangladesh. Data was collected in three south-central districts, namely Patuakhali, Jhalakathi, and Pirojpur in 2022. A total of 222 farmers participated in the study, with 120 practicing plain land cultivation, while the remaining 102 were engaged in sorjan farming. Results show that the cropping intensity of farm households increased from 100–200% to 300–500% in sorjan farming. Farmers earned the highest net return by following the crop combinations of ‘Bottle gourd-Potato-Sweet gourd-Indian spinach’, ‘Banana-Okra-Snake gourd-Bottle gourd’, and ‘Jujube-Stem amaranth-Indian spinach’ under the sorjan method in Patuakhali, Jhalakathi, and Pirojpur districts, respectively. On average, farmers realized an additional net benefit of Tk. 55 for every Tk. 100 invested upon transitioning from plain land farming (benefit cost ratio, BCR = 1.25) to sorjan cultivation (BCR = 1.80). The results of the logit model found that household size, farming experience, and extension contact positively influenced the adoption of the sorjan method, while farmers' age and farm size had a negative influence. Further analysis of challenges in both types of farming revealed the advantages of sorjan over plain land cultivation, categorizing them into four distinct areas: environmental, management, input-related, and market issues. Government policies should prioritize holistic support systems and foster collaborative knowledge-sharing among stakeholders to enhance the adoption and diffusion of sorjan farming in coastal communities.

51. Algae-based bioremediation of soil, water, and air: a solution to polluted environment

Author: Munir N.; Sarwar Z.; Abideen Z.; Saleem F.; Hasanuzzaman M.; Siddiqui Z.S.; El-Keblawy A.

Year: 2025

DOI / Link: https://doi.org/10.1007/s11356-025-36880-9

Abstract:

The publication abstract for 'Algae-based bioremediation of soil, water, and air: a solution to polluted environment' (DOI: 10.1007/s11356-025-36880-9) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105016516073?origin=resultslist.

52. Evaluating farmers' satisfaction from high-yielding rice (Oryza sativa) variety cultivation in boro season: evidence from adaptive trials in Bangladesh

Author: Hassan M.M.; Habib M.A.; Nayak S.; Jewel Z.A.; Resmi S.I.; Hasan M.

Year: 2025

DOI / Link: https://doi.org/10.1007/s44447-025-00047-2

Abstract:

The publication abstract for 'Evaluating farmers' satisfaction from high-yielding rice (Oryza sativa) variety cultivation in boro season: evidence from adaptive trials in Bangladesh' (DOI: 10.1007/s44447-025-00047-2) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105017166269?origin=resultslist.

53. Reactive Oxygen Species in Crop Plants: Production, Detoxification, Signaling, and Molecular Cross-Talk

Author: Janeeshma E.; Das S.; Bouzroud S.; Sarraf M.; Akhtar N.; Mousavi H.; Ibrahimova U.; Fujita M.; Hasanuzzaman M.

Year: 2026

DOI / Link: https://doi.org/10.3390/plants15142212

Abstract:

The publication abstract for 'Reactive Oxygen Species in Crop Plants: Production, Detoxification, Signaling, and Molecular Cross-Talk' (DOI: 10.3390/plants15142212) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105045907734?origin=resultslist.

54. Climate-smart aquaculture practice: Changes in economic viability and efficiency of mud crab fattening in coastal Bangladesh

Author: Sujan M.H.K.; Sarkar M.A.R.; Sultana M.; Akber M.A.; McKenzie A.M.; Kazal M.M.H.; Islam I.; Aziz A.A.

Year: 2025

DOI / Link: https://doi.org/10.1016/j.crm.2025.100726

Abstract:

The publication abstract for 'Climate-smart aquaculture practice: Changes in economic viability and efficiency of mud crab fattening in coastal Bangladesh' (DOI: 10.1016/j.crm.2025.100726) is indexed in the Scopus database and accessible at https://www.scopus.com/pages/publications/105010475933?origin=resultslist.