

# ANNUAL REPORT 2022



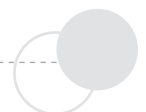
**Bangabandhu Sheikh Mujibur Rahman Agricultural University**  
Gazipur 1706, Bangladesh



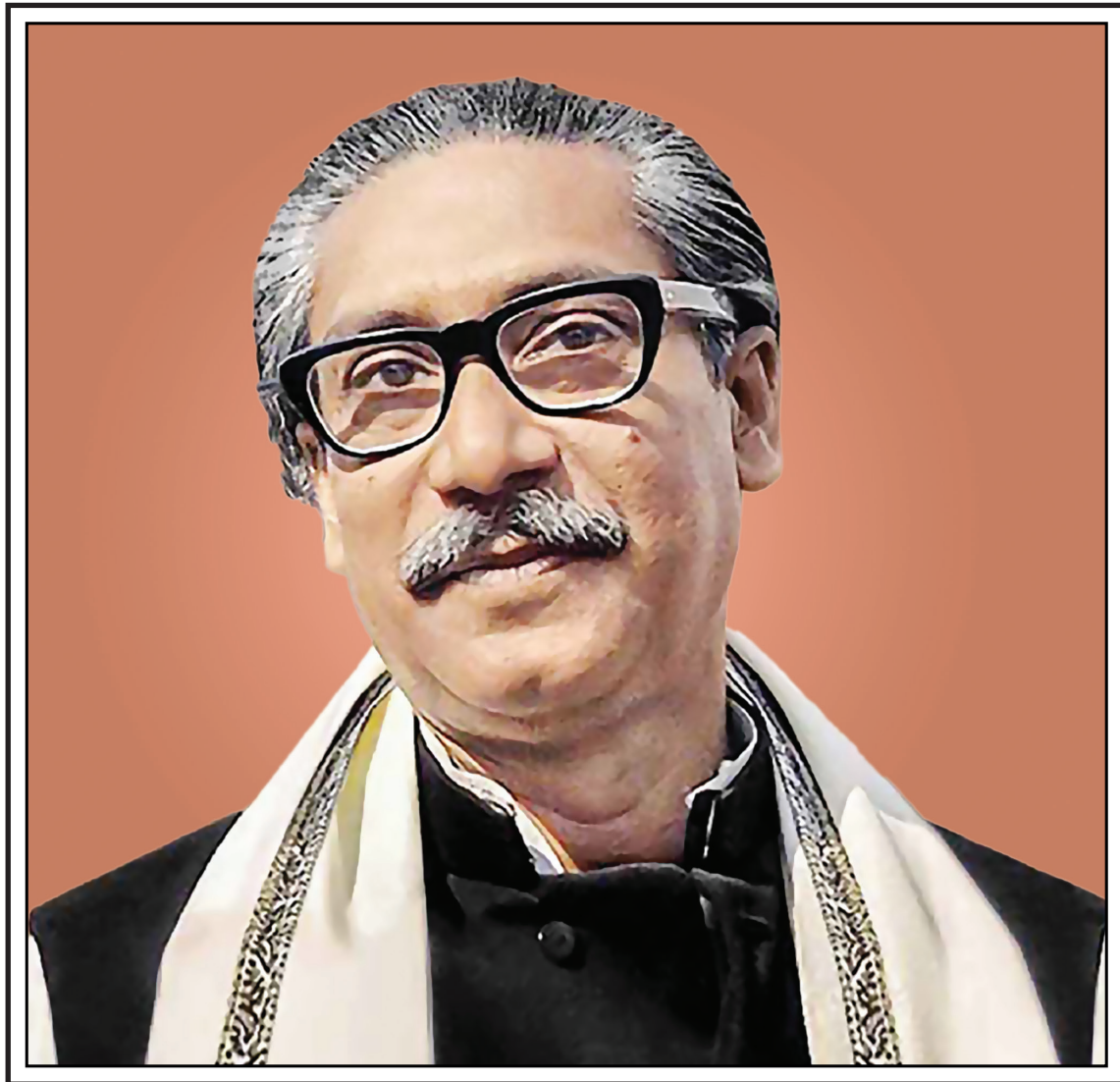
# Annual Report 2022



**Bangabandhu Sheikh Mujibur Rahman Agricultural University**  
Gazipur 1706, Bangladesh







**Father of the Nation**  
**Bangabandhu Sheikh Mujibur Rahman**



**Bangabandhu Sheikh Mujibur Rahman Agricultural University**  
Gazipur 1706, Bangladesh



## Annual Report 2022

July 2023

### Compiled by

**Prof. Dr. A. K. M. Aminul Islam**, Director (Research)

**Md. Sabiul Islam**, Deputy Registrar

### Published by

Bangabandhu Sheikh Mujibur Rahman Agricultural University

### Correspondence

Director (Research)

Bangabandhu Sheikh Mujibur Rahman Agricultural University

Gazipur 1706, Bangladesh

Tel: +8802 9205324, Fax: + 8802 9205333

E-Mail: [directorresearch@bsmrau.edu.bd](mailto:directorresearch@bsmrau.edu.bd)

[www.bsmrau.edu.bd/res](http://www.bsmrau.edu.bd/res)

### Cover Design by

A. K. M. Aminul Islam

### Printed by

**Blu Sky Media**

85, New Circular Road, Dhaka

Cell: 01725520602



## Preface



**Vice-Chancellor**  
**Bangabandhu Sheikh Mujibur Rahman**  
**Agricultural University**  
Gazipur 1706

It gives me mammoth pleasure that the Research Management Wing (RMW) of Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU) is going to publish its Annual Report for the year of 2022. This Report contains the academic, administrative and developmental achievements as well as progress of research activities of this University. The report also presents achievements of the students, faculty members and staff are implementing to fulfill our vision, mission and goal. Moreover, this University is focused on three priority areas; academic, research and outreach for transforming the institution to a level higher than the existing. The researchers of this University have conferring their tireless efforts with a view to follow the sustainable approaches in building up the nation through uplifting the agricultural development. Consequently, BSMRAU secured first position in international rankings (Scimago, Scopus) and annual performance agreements (APA) among the public and private universities of the country.

I would like to congratulate all faculty members, students and staff of this University those who contributed a lot in achieving prestigious ranking positions and generating new information that has been incorporated in this annual report. I also confer heartfelt thanks to Director (Research) and his associates for their efforts rendered in its publication.

I do hereby believe and hope that this report enlightens an updated information on the status of our academic, research, outreach, administrative and developmental activities for the fiscal year 2022 which is thought to be the most outstanding in maintaining the quality of the University.

Finally, I would like to acknowledge the ongoing commitment and dedication of our colleagues in the overall improvement, holding the Excellency and the development of this university.

I look forward to have another unique Annual Report of BSMRAU in the coming year.

(Prof. Dr. Md. Giashuddin Miah)



## Foreword



**Director (Research)**  
**Bangabandhu Sheikh Mujibur Rahman**  
**Agricultural University**  
Gazipur 1706

It is undeniably a praise for me to be the part of the publication process of the “Annual Report 2022” of Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU) for the sixth time. This report contain outstanding successes achieved by students, teachers, officers and staffs of BSMRAU. It makes me privileged to publish this Report with the brilliant contribution of the scholarly communities of this university.

I appreciated the commitment of the students, teachers and staff of BSMRAU for their significant contribution to assure the publication of Annual Report 2022.

May I take the chance to thank everybody, especially the Deans of the faculties, Head of the departments, Directors, Provosts, Proctor, Section Heads who helped me from different angles in the publication process of this Annual Report. I would also like to thank University Authority for their generous support for the publication of this Report.

I look forward for all the accomplishment in future.

**(Prof. Dr. A. K. M. Aminul Islam)**



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## Vision, Mission, Goal and Objective



### Vision

Fostering quality teaching and research that develop highly skilled and educated people necessary to advancing the well-being of the nation in general and farming communities in particular.



### Mission

Contributing to society through the pursuit of agricultural education, research and innovation for sustainable development.



### Goal

Enhancing the growth and development of the farm economy in Bangladesh by providing intellectual leadership and producing quality graduates in different fields of agriculture.



### Objectives

- To serve as a “Center of Excellence” for agricultural education leading to BS, MS and PhD degrees.
- To provide an education consistent with international standards through well designed academic programs.
- To conduct basic and applied research to generate appropriate and sustainable technologies in the different fields of agriculture.
- To disseminate and transfer generated technologies to the end users through training and outreach activities.
- To provide policy support focusing on local and national issues within the national agricultural research framework with emphasis on food and nutrition securities of the country.

## Wings of BSMRAU

### Academic

US Course-credit (Trimester) system of education

### Research

Need-based basic and applied research using frontier technology

### Outreach

Disseminate and transfer technologies through training and on-farm activities



# Faculty and Academic Departments

## Faculty of Graduate Studies

- All MS and PhD offering departments are under the umbrella of faculty of graduate studies

## Faculty of Agriculture

- Department of Agricultural Extension and Rural Development
- Department of Agroforestry and Environment
- Department of Agronomy
- Department of Agricultural Engineering
- Department of Agro-Processing
- Department of Biochemistry and Molecular Biology
- Department of Environmental Science
- Department of Biotechnology
- Department of Computer Science and Information Technology
- Department of Crop Botany
- Department of Entomology
- Department of Genetics and Plant Breeding
- Department of Horticulture
- Department of Plant Pathology
- Department of Soil Science
- Seed Science and Technology Unit

## Faculty of Fisheries

- Department of Aquaculture
- Department of Fisheries Biology and Aquatic Environment
- Department of Fisheries Management
- Department of Fisheries Technology
- Department of Genetics and Fish Breeding

## Faculty of Veterinary Medicine and Animal Science

- Department of Anatomy and Histology
- Department of Animal Breeding and Genetics
- Department of Animal Science and Nutrition
- Department of Dairy and Poultry Science
- Department of Gynecology, Obstetrics and Reproductive Health



- Department of Medicine
- Department of Microbiology and Public Health
- Department of Pathobiology
- Department of Physiology and Pharmacology
- Department of Surgery and Radiology

### **Faculty of Agricultural Economics and Rural Development**

- Department of Agricultural Economics
- Department of Agricultural Finance and Cooperative
- Department of Agri-business
- Department of Rural Development
- Department of Statistics

### **Faculty of Forestry and Environment**

- Department of Forest Ecology
- Department of Silviculture
- Department of Wood Science and Technology
- Department of Forest Protection
- Department of Forest Policy and Management
- Department of Agroforestry and Environment
- Department of Natural Resource and Conservation
- Department of Remote Sensing and GIS
- Department of Environmental Hazard and Disaster Management

### **Faculty of Agricultural and Bio-Resource Engineering (Proposed)**

- Department of Farm Machinery and Precision Engineering
- Department of Irrigation and Water Resources Management
- Department of Computer Science and Information Technology
- Department of Structures and Environmental Engineering
- Department of Food Engineering

### **Institutes**

- Institute of Biotechnology and Genetic Engineering (IBGE)
- Institute of Climate Change and Environment (ICCE)
- Institute of Food Safety and Processing (IFSP)





## Administration

- ◆ Chancellor
- ◆ Syndicate
- ◆ Academic Council
- ◆ Vice Chancellor
- ◆ Treasurer



**Md. Abdul Hamid**

Hon'ble President  
People's Republic of Bangladesh  
&

**Chancellor**

Bangabandhu Sheikh Mujibur Rahman Agricultural University  
Gazipur 1706

**BSMRAU Syndicate**

**Chairman**



**Prof. Dr. Md. Giashuddin Miah**

Vice-Chancellor, BSMRAU



## Member



**Md. Zahid Ahsan Russel**  
Hon'ble State Minister  
Ministry of Youth & Sports



**Meher Afroze**  
Hon'ble Parliament  
Member, 198 Gazipur-5



**Ahasanul Islam (Titu)**  
Hon'ble Parliament  
Member, 135 Tangail-6



**Prof. Tofayel Ahamed**  
Treasurer  
BSMRAU



**Prof. Dr. Lutful Hassan**  
Vice-Chancellor  
BAU, Mymensingh



**Md. Abu Bakker Siddique**  
Secretary  
Secondary and Higher  
Education Division  
Ministry of Education



**Dr. Debasish Sarker**  
Director General  
BARI, Gazipur



**Dr. Shaikh Mohammad  
Bokhtiar**  
Executive Chairman  
BARC, Dhaka



**Dr. S M Jahangir Hossain**  
Director General  
BLRI, Savar



**Prof. Dr. Shamsul Alam**  
Hon'ble Minister of State  
Ministry of Planning



**Prof. Dr. Md. Abdul Mannan  
Akanda**  
Former Vice-chancellor  
BSMRAU, Gazipur



**Prof. Dr. Md. Enamul Haque**  
Dean, Faculty of Agriculture  
BSMRAU



**Prof. Dr. Md. Golam Haider**  
Dean, Faculty of  
Veterinary Medicine and  
Animal Science



**Prof. Dr. M. Moynul Haque**  
Dept. of Agronomy  
BSMRAU



**Prof. Dr. A. K. M. Aminul Islam**  
Dept. of Genetics and Plant  
Breeding, BSMRAU



**Secretary  
Md. Shirajul Islam Talukder**  
Registrar



102<sup>nd</sup> Syndicate



103<sup>rd</sup> Syndicate



104<sup>th</sup> Syndicate



105<sup>th</sup> Syndicate

Syndicate	Date	Academic Council	Date
102 <sup>nd</sup>	22-01-2022	136 <sup>th</sup> (Emergency)	18-01-2022
103 <sup>rd</sup>	21-05-2022	137 <sup>th</sup>	28-02-2022
104 <sup>th</sup>	28-06-2022	138 <sup>th</sup>	25-04-2022
105 <sup>th</sup>	22-10-2022	139 <sup>th</sup>	26-06-2022
		140 <sup>th</sup>	29-09-2022

## Academic Council

### Mamber

- All Deans
- All Department Heads
- All Professors
- All Associate Professors
- Library Chief
- Director (Research), BARI
- Dean, Faculty of Agriculture, BAU

### Secretary

Registrar, BSMRAU





## Vice-Chancellor Office

### Vice-Chancellor

Prof. Dr. Md. Giashuddin Miah, 11-06-2017 to date

### Officers and Staff

Name	Designation
Dr. A.H.M. Asadur Rahman	Deputy Controller of Exam (PS to VC)
Md. Saifuzzaman Sheikh	Assistant Registrar (PA to VC)

### Administrative activities

Vice-Chancellor is the Chief executive of the university administration directing academic, research and outreach activities and also the ex-officio Chairman of the Academic Council and the Syndicate of the university. He ensures the provisions of University Acts, Statutes, Rules and Regulations are faithfully observed in order to promote the general efficiency and good order of the University. The Vice-Chancellor's Office provides general assistance to the Vice-Chancellor and general administration in respect of staff and property in the Vice-Chancellery. The office serves as the Secretariat to Syndicate and other managerial meetings. Administrative, secretarial, technical and other assistance and support is extended by the staff of the Office of the Vice-Chancellor to carry out the duties in all these roles for the maximum benefit for all concerned. All aspects of teaching and learning, research, outreach activities, welfare, discipline, entrepreneurship, career guidance etc. of all students and staff are carried out under the guidance of the Vice-Chancellor and the staff is geared towards assisting him for the successful completion of the tasks involved. The office provides reception, hospitality service and general welfare to all University Guests. All activities of the office are regulated by the Deputy Controller of Exam (PS to VC) and Assistant Registrar (PA to VC); as per the instructions and/or direction. The PS help the Vice Chancellor meet his objectives and targets by effectively planning his schedule and travels both within and outside the country.

In 2022, honorable Vice-Chancellor Prof. Dr. Md. Giashuddin Miah presided over various precious meetings and took necessary steps to implement the recommendations of the meetings with the Treasurer, Deans, Directors, Provosts, Proctor, and Head of the Institutes, Departments and Sections.

Prof. Dr. Miah is involved in education and research activities of the university in addition to his numerous administrative responsibilities. He supervised four PhD and two MS students and published three research papers in the national and international journals during the reporting year. This year 57 foreign students got enrolled at undergraduate and 02 at graduate level in this university with the heartfelt endeavor of the honorable Vice-Chancellor.

While the past two years have presented unprecedented challenges, primarily because of COVID-19, in 2021/22 the university continued all activities almost regularly and at the same time make progress towards its strategic aims and strengthening its underlying academic and research position. The Vice-Chancellor, faculties, staff, students and stakeholders deserve much credit for how they have dealt with the uncertainties. They have achieved much during a time of difficulty and have impressed the authority with their resolve.

In addition to academic programs, as a faculty member the VC also involved in various research projects financed by universities own research fund and/or other national and international organizations. Experienced and skilled faculties are frequently awarded research fund from the University Grants Commission of Bangladesh, Bangladesh Agricultural Research Council, Krishi Gobeshona Foundation, Ministry of Education, BAS-USDA, Climate Change Fund and Ministry of Science and Technology through



open competition. A total of 105 research projects has been running in the university at present in different phases of development and the Vice-Chancellors' Office is directly involved in these activities.

With untiring efforts and dynamic leadership of Honorable Vice-Chancellor, the university library has been well-equipped and fully digitalized. All books in the library are indexed, categorized, worked by Koba ILS, MRCS 21 (Machine Readable Catalogue 21), whose link is in the BSMRAU digital library of the university's own website ([www.bsmrau.edu.bd](http://www.bsmrau.edu.bd)) (Author, Title, Subject Series, ISBN). By searching, students/teachers and researchers can find out whether the book needed is in the library or not. Online journals and e-books have been subscribed, the link is given in the online journal and e-books link of the university's own website and all thesis and dissertations of the university has already been uploaded online.

He arranged workshops on 'Quality Culture and Quality Assurance within the University' for faculty members to retain and improve the reputation of course-credit system-based education and research activities of the university. Honorable Vice-Chancellor also organized a day-long workshop for teachers to improve the quality of higher education and also organized workshops on long-term research programs of crop development and management Plant Protection, Climate Change and Environmental issues. Prof. Miah organized training programs on office management to enhance the skills of university teachers, officers and staff.

Prof. Dr. Md. Giashuddin Miah, Vice-Chancellor of the University, under his dynamic guidance the Department of Agroforestry and Environment has been transformed successfully into in to the Faculty of Forestry and Environment. Furthermore, all preparations and formalities have been completed for launching two another institutes namely Institute of Climate Change & Environment (ICCE) and Institute on Food Safety & Processing (IFSP) besides the Institute of Biotechnology & Genetic Engineering (IBGE). The Hon'ble Vice-Chancellor, recruited 6 teachers, 2 officer, 54 employees in the reporting year with the approval of the university syndicate. He also promoted 25 teachers, 14 officers and 10 employees in this year.

Besides academic, research and administrative activities, the university arranged Annual Sports on 17 February, celebrated 13 February as Kribishid Dibosh, 21st February as Shahid Dibosh & International Mother Language Day, Historic 7th March, 17th March as the Birth day of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman, celebrating 26 March as Independence Day, organized meeting on the eve of Mujibnagar Day at 17th April, celebrated 9th August as Tree Plantation day, 15th August as National Mourning Day, 15th November Krishi Dibosh, 22nd November University Day, 14th December Intellectual Martyred Day and 16th December as the glorious Victory Day with due solemnity and dignity. Moreover, Orientation Program of newly admitted students was held on the scheduled day of each term. Besides, the university also observed and celebrated several other days with world community.

Under the overall supervision of the Hon'ble Vice-Chancellor, to accommodate more students and faculties with expanding academic and research facilities two 10-storey buildings respectively, 2nd Agriculture Faculty and Veterinary complex building, two 10-storey halls, one for boys and another for girls, two 10-storey Utility Flats for teachers' and staff, 5-storey International Complex, 2-storey field research laboratory, construction of internal roads, surface drain and other infrastructural development works has been completed almost in the final form. A collection of significant numbers of books and journals, vehicles, scientific machines, laboratory equipment's and office materials, furniture's and land development works has been processing satisfactorily.

The Hon'ble Vice-Chancellor has worked on formulating and revising several rules and regulation, including 'Internship Regulations' for students of the Faculty of Veterinary Medicine & Animal Sciences, and the rules and regulations to the Management of Veterinary Teaching Hospitals.



## Other achievements

The Hon'ble Vice-Chancellor Prof. Dr. Md. Giashuddin Miah attended several meetings with high profile dignitaries during the year 2021-22. He paid a visit to Hon'ble President and Hon'ble Prime Minister to discuss arranging convocation and other matters related to the university. He also attended meetings of the Full Commission and Finance committee meetings of UGC, Commonwealth Scholarship Committee meeting organized by UGC, Meeting of Public Service Commission appointment committee, Annual general meeting of the National Council of Scouts of Bangladesh, Meeting of the Board of Trustees of National Agriculture Award Trust, Bangabandhu National Agricultural Award meeting, Meeting of Board of Director of National Science and Technology Museum, Syndicate, Regent Board and Teacher Recruitment Board Meeting of Sylhet Agricultural University, Pabna University of Science and Technology, Teachers Recruitment Committee Meeting of Dhaka University of Engineering & Technology, various meetings of Kribishid Institution Bangladesh, National Steering Committee Meeting, Bangla Academy Book Fair, Association of University in Bangladesh (AUB), various meeting I seminar I symposium held at the Bangladesh Agricultural Research Council, Jute Research Institute, Day meetings held in the Ministry of Textiles and Jute, celebration of National Fisheries Week, World Water Day and many other important meetings, inaugural ceremonies, etc. Besides, the Vice Chancellor attended different national and international seminars I symposiums held at BSMRAU campus as well as in Dhaka.

The Vice-Chancellor Prof. Dr. Md. Giashuddin Miah signed a significant number of MoUs between Bangabandhu Sheikh Mujibur Rahman Agricultural University and various renowned national and international universities/institutes. MoU and LAO signatures are in process with other local and international universities and institutions.

Every year, hundreds of research articles from this university are published in internationally reported journals of the high-impact factors. A survey on recently published by Spanish-based SIMAGO and US-based SCOPUS, revealed that BSMRAU ranked as 1st position for the 2nd time among the research institutes and universities in the country. Similarly, in the APA Ranking, the university also achieved the top position for the 2nd time among the 46 public universities in the country. Though the university is the smallest one in terms of number of students of undergraduate programs, the position of the university at present in the country and across the world is, indeed, promising and praiseworthy.



## Office of the Treasurer

### Treasurer

Prof. Tofayel Ahamed, 23-10-2017 to date

### Officers and Staff

Name	Designation
Md. Amdadul Islam	Section Officer (PA to Treasurer)
Md. Mamun Miah	MLSS

### Finance and Accounts Section

#### Officers and Staff

Name	Designation
<b>Finance &amp; Accounts</b>	
Md. Monowarul Haque Khan	Deputy Director
Mahmudul Hasan Rakib	Assistant Director
Md. Shalahuddin Hossain	Accountant
Mohammad Akbar Ali	Accountant
S M Faisal Ahmed	Office Assistant cum Computer Operator
Md. Manik Miah	Accounts Assistant
Md. Alamgir Hossain	MLSS

#### Budget & Finance

Shahidul Hasan Shamim	Deputy Director
Md. Salim Mahmud	Accounts Officer

#### Pension & GPF

Md. Emdadul Hoque	Deputy Director
Md. Ashraful Islam	Senior Accountant

#### Student Welfare & Scholarship

Md. Atikur Rahman	Assistant Director
Tonmy Kumar Das	Accountant

#### Cash

Md. Mokaddes Ali	Accounts Officer
Masud Rana	Assistant Cashier
Md. Anower Hossain	Senior Cash Sarker

### Activities

Treasure supervises the fund of the university and gives opinion on financial rules. Treasure presents the



annual budget and prepare the statement of expenditure as well as look after the expenditures according to the line of the budget. Treasure also sign different deeds on behalf of the university.

### Finance Committee Meeting

SL. No	Period	General	Emergency	Total
	From 1st till 31.12.2021	53	-	53
	2022	02	-	02

### Statement of Income and Expenditure

#### a) Income

Sl. No.	Source of Income	Amount (Tk. in Lac) Actual Income (2021-2022)
1.	UGC Grants	7238.00
2.	Students	180.94
3.	Transport	18.12
4.	House Rent	23.70
5.	Electricity Bill	37.17
6.	Gas Bill	21.56
7.	Telephone Bill	0.00
8.	Farm	8.33
9.	Others	128.89
10.	Opening Balance	740.00
<b>Total Income</b>		<b>8396.71</b>

#### b) Expenditure

Sl. No.	Economic Code	Source of Expenditure	Amount (Tk. in Lac) Actual Expenses (2021-2022)
1.	3631101	Salary support	2444.07
2.	3631102	Allowance support	1815.18
3.	3631103	Goods and service support	1956.57
4.	3631104	Pension and retirement benefit support	784.00
5.	3631107	Special grant	0.00
6.	3631108	Research grant	224.61
7.	3631199	Other grant	50.75
8.	3632	Capital Expenditure	310.87
<b>Total Expenditure</b>			<b>7586.05</b>



## Faculty of Graduate Studies

Degree Offering Departments	Program	
	MS	PhD
Agricultural Economics (AEC)	√	√
Agricultural Extension and Rural Development (AER )	√	√
Agroforestry and Environment (AFE)	√	√
Agribusiness (AGB)	√	-
Agricultural Engineering (AGE)	√	-
Agrometeorology (AGM)	√	-
Agro-processing (AGP)	√	-
Agronomy (AGR)	√	-
Anatomy and Histology (ANH)	√	-
Aquaculture (AQC)	√	-
Animal Science and Nutrition (ASN)	√	√
Crop Botany (CBT)	√	√
Dairy and Poultry Science (DPS)	√	-
Environmental Science (ENS)	√	√
Entomology (ENT)	√	√
Fisheries Biology and Aquatic Environment (FBE)	√	-
Fisheries Technology (FIT)	√	-
Fisheries Management (FMG)	√	-
Genetics and Fish Breeding (GFB)	√	-
Gynecology, Obstetrics and Reproductive Health (GOR)	√	-
Genetics and Plant Breeding (GPB)	√	√
Horticulture (HRT)	√	√
Institute of Biotechnology and Genetic Engineering (IBGE)	√	√
Medicine (MED)	√	-
Microbiology and Public Health (MPH)	√	-
Pathobiology (PBL)	√	-
Physiology and Pharmacology (PHP)	√	-
Plant Pathology (PLP)	√	√
Surgery and Radiology (SRA)	√	-
Soil Science (SSC)	√	√
Seed Science and Technology (SST)	√	√



## Faculty of Graduate Studies

[www.bsmrau.edu.bd/fgds](http://www.bsmrau.edu.bd/fgds)

### Dean

Prof. Dr. Md. Abu Ashraf Khan, 10-06-2020 to 09-06-2022

Prof. Dr. GKM Mustafizur Rahman, 10-06-2022 to till date

Name	Designation
<b>Academic Section</b>	
Md. Hurmus Ali	Deputy Registrar
Zarif Uddin Ahmmad	Deputy Registrar
Md. Nazmul Ahasan Bhuiyan	Assistant Registrar (PA to Dean)
Md. Shamsul Haque	Section Officer
Mahmuda Akter	Section Officer
Md. Shahidul Islam	Administrative Officer
Md. Amjad Hossain	Office Assistant Cum Computer Operator
Md. Rafiqul Islam	MLSS
Md. Atikur Rahman	Attendant
<b>Examination Section</b>	
Jinnat Ara Begum	Deputy Controller of Examinations
Khandaker Sazia Afrin	Deputy Registrar
Shiful Islam	Graphic Designer
Hamjalal Sarker	Office Assistant Cum Computer Operator
Ishrak Mahmud Shuvo	Record Keeper

### Number of Enrolled Students in MS and PhD Program during 2022

Existing (Enrolled) Students	Term	MS	PhD	Total
	Summer	416	25	<b>441</b>
	Autumn	391	21	<b>412</b>
	Winter	511	23	<b>534</b>

### Number of Graduated Students during 2022

Graduated Students	Term	MS	PhD	Total
	Summer	50	3	<b>53</b>
	Autumn			
	Winter			
<b>Total Graduated</b>				



## Department wise Admitted Students in MS and PhD Program during 2022 Year

(Summer 2022 to Winter 2022 term)

Departments	Summer' 22		Autumn' 22		Winter' 22	
	MS	PhD	MS	PhD	MS	PhD
Agricultural Economics (AEC)	3	-	-	-	13	1
Agricultural Extension and Rural Development (AER )	13	-	3	-	2	-
Agroforestry and Environment (AFE)	16	-	4	-	12	1
Agribusiness (AGB)	4	-	1	-	7	-
Agricultural Engineering (AGE)	-	-	2	-	1	-
Agrometeorology (AGM)	-	-	-	-	7	-
Agro-processing (AGP)	1	-	-	-	1	-
Agronomy (AGR)	9	-	3	-	12	-
Anatomy and Histology (ANH)	3	-	-	-	1	-
Aquaculture (AQC)	2	-	1	-	9	-
Animal Science and Nutrition (ASN)	2	-	-	-	-	-
Crop Botany (CBT)	2	-	-	-	3	-
Dairy and Poultry Science (DPS)	-	-	-	-	1	-
Environmental Science (ENS)	2	-	2	-	2	-
Entomology (ENT)	8	-	2	-	10	-
Fisheries Biology and Aquatic Environment (FBE)	3	-	-	-	5	-
Fisheries Technology (FIT)	-	-	-	-	5	-
Fisheries Management (FMG)	1	-	4	-	9	-
Genetics and Fish Breeding (GFB)	3	-	5	-	6	-
Gynecology, Obstetrics and Reproductive Health (GOR)	-	-	-	-	1	-
Genetics and Plant Breeding (GPB)	5	2	1	-	6	1
Horticulture (HRT)	11	-	2	-	9	-
Institute of Biotechnology and Genetic Engineering (IBGE)	5	-	-	-	4	-
Medicine (MED)	-	-	-	-	2	-
Microbiology and Public Health (MPH)	-	-	2	-	4	-
Pathobiology (PBL)	1	-	-	-	3	-
Physiology and Pharmacology (PHP)	-	-	-	-	1	-
Plant Pathology (PLP)	3	-	1	-	9	-
Surgery and Radiology (SRA)	-	-	-	-	1	-
Soil Science (SSC)	7	1	4	-	14	-
Seed Science and Technology (SST)	-	-	-	-	-	-
<b>Total</b>	<b>104</b>	<b>3</b>	<b>37</b>	<b>-</b>	<b>160</b>	<b>3</b>





## Department wise Students Degree Completed during 2022 Year

(Summer 2022 to Winter 2022 term)

Departments	Summer' 22		Autumn' 22		Winter' 22	
	MS	PhD	MS	PhD	MS	PhD
Agricultural Economics (AEC)	02	-	-	-	-	-
Agricultural Extension and Rural Development (AER )	03	01	03	-	-	-
Agroforestry and Environment (AFE)	03	01	01	01	-	-
Agribusiness (AGB)	-	-	-	-	-	-
Agricultural Engineering (AGE)	-	-	-	-	-	-
Agrometeorology (AGM)	-	-	-	-	-	-
Agro-processing (AGP)	-	-	-	-	-	-
Agronomy (AGR)	08	-	05	-	-	-
Anatomy and Histology (ANH)	-	-	-	-	-	-
Aquaculture (AQC)	-	-	01	-	-	-
Animal Science and Nutrition (ASN)	04	-	-	-	-	-
Crop Botany (CBT)	-	-	-	-	-	-
Dairy and Poultry Science (DPS)	01	-	-	-	-	-
Environmental Science (ENS)	02	-	-	-	-	-
Entomology (ENT)	06	-	04	-	-	-
Fisheries Biology and Aquatic Environment (FBE)	-	-	04	-	-	-
Fisheries Technology (FIT)	-	-	03	-	-	-
Fisheries Management (FMG)	-	-	-	-	-	-
Genetics and Fish Breeding (GFB)	06	-	02	-	-	-
Gynecology, Obstetrics and Reproductive Health (GOR)	01	-	-	-	-	-
Genetics and Plant Breeding (GPB)	05	-	01	01	-	-
Horticulture (HRT)	03	01	-	-	-	-
Institute of Biotechnology and Genetic Engineering (IBGE)	03	-	05	-	-	-
Medicine (MED)	-	-	-	-	-	-
Microbiology and Public Health (MPH)	-	-	-	-	-	-
Pathobiology (PBL)	01	-	01	-	-	-
Physiology and Pharmacology (PHP)	-	-	-	-	-	-
Plant Pathology (PLP)	02	-	-	-	-	-
Surgery and Radiology (SRA)	-	-	-	-	-	-
Soil Science (SSC)	-	-	-	-	-	-
Seed Science and Technology (SST)	-	-	-	-	-	-
<b>Total</b>	<b>50</b>	<b>03</b>	<b>30</b>	<b>02</b>	-	-

**No. of Students Admitted in PGDRD Program (2022) = 0.0**

**No. of Students Degree Completed in PGDRD Program (2022) = 15**



## Faculty of Agriculture

- Department of Agricultural Extension and Rural Development
- Department of Agronomy
- Department of Agricultural Engineering
- Department of Agro-Processing
- Department of Biochemistry and Molecular Biology
- Department of Computer Science and Information Technology
- Department of Crop Botany
- Department of Environmental Science
- Department of Entomology
- Department of Genetics and Plant Breeding
- Department of Horticulture
- Department of Plant Pathology
- Department of Soil Science
- Seed Science and Technology Unit





## Faculty of Agriculture

[www.bsmrau.edu.bd/agriculture](http://www.bsmrau.edu.bd/agriculture)

### Dean

Prof. Dr. Md. Enamul Haque, 14-06-2021 to till date

### Officers and Staff

Name	Designation
Md. Shafiqul Islam Khan	Deputy Registrar
Md. Rezaul Karim	Assistant Registrar
Md. Ashraf Ali	Administrative Officer
Md. Anwar Hossain	MLSS
Rejvi Sharif	MLSS

### Admission Statistics of BS (Ag) Student for 2022

Term	Summer Term	Summer	Remarks
No. of student admitted	110		
No. of student admitted from merit list	110		
No. of student admitted from FF Quota	6		
No. of student admitted from Tribal Quota	1		
No. of student admitted from waiting list	-		
Minimum GPA of the admitted student	5+5=10		
Maximum GPA of the admitted student	5+5=10		

### Year and term-wise students enrollment, exams held, results published and students passed in BS Programs in 2022

#### BS (1<sup>st</sup> Year)

Name of the term	Not. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	110	06 February, 2022	02 March to 26 May 2022		
Autumn	110	05 June, 2022	26 June to 11 September 2022	-	-
Winter	110	10 October, 2022	31 October to 31 December 2022	-	-

#### BS (2<sup>nd</sup> Year)

Name of the term	Not. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	114	06 February, 2022	02 March to 26 May 2022		
Autumn	114	05 June, 2022	26 June to 11 September 2022	-	-
Winter	114	10 October, 2022	31 October to 31 December 2022	-	-

**BS (3<sup>rd</sup> Year)**

Name of the term	Not. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	109	06 February, 2022	02 March to 26 May 2022		
Autumn	109	05 June, 2022	26 June to 11 September 2022	-	-
Winter	109	10 October, 2022	31 October to 31 December 2022	-	-

**BS (4<sup>th</sup> Year)**

Name of the term	Not. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	100	06 February, 2022	02 March to 26 May 2022		
Autumn	100	05 June, 2022	26 June to 11 September 2022	-	-
Winter	100	10 October, 2022	31 October to 31 December 2022	-	-

**Curricular Layout for BS (Agriculture) Program****1<sup>st</sup> year (Effective form Summer Term 2020)**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
Summer	13 (10+03)	Autumn	13 (10+03)	Winter	16 (12+04)

Total Credit Hrs. for 1<sup>st</sup> year = 14, and 42 (T+P: 32+10)

**2<sup>nd</sup> Year (Effective form Summer Term 2020)**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
Summer	18 (13+5)	Autumn	18 (13+05)	Winter	17 (13+04)

Total Credit hrs. for 2<sup>nd</sup> year = 15, and 53 (T+P: 39+14)

**3<sup>rd</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
Summer	21 (16+5)	Autumn	17(13+04)	Winter	20 (15+05)

Total Credit hrs, for 3<sup>rd</sup> year =16 and 58 (T+P: 44+14)

**4<sup>th</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
Summer	21 (16+5)	Autumn	19 (14+05)	Winter	07

Total Credit hrs. for 4<sup>th</sup> year = 11 and 47 (T+P+I: 30+10+7)

**Total Course = 56, Total Credit hrs. = 200** (Theory 145 Cr. hrs.+ Practical 48 Cr. hrs + Internship Cr. hrs.)



# Department of Agricultural Extension & Rural Development

[www.bsmrau.edu.bd/aer](http://www.bsmrau.edu.bd/aer)

## Faculty Members

### Professor

Dr. Md. Enamul Haque  
Dr. Md. Safiul Islam Afrad  
Dr. Shaikh Shamim Hasan  
Dr. Farhana Yeasmin  
Mohammed Rokonzaman

### Associate Professor

Dr. Muhammad Ziaul Hoque  
Dr. Foyez Ahmed Prodhan

### Lecturer

Shahriar Hasan  
Soumitra Saha

## Officers and Staff

Name	Designation
Md. Abul Kasham	Senior MLSS
Md. Alamin Hossain	Lab Attendant

## MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Md. Maksudul Haque (2015-05-3742)	Residents' Perception on Urban Rooftop Gardening in Dhaka Metropolitan Area	Dr. Muhammad Ziaul Hoque	Win/21
Md. Harun Or Roshid (2015-05-3561)	Coping Strategy of Flood for Livelihood Management: A Case of Purnimagati Union Under Sirajganj District	Dr. Md. Enamul Haque	Sum/22
Niamah Atya Mim (2016-05-3810)	Farmers' perception of the role of tobacco cultivation on environmental degradation in the hilly areas of Bangladesh	Dr. Shaikh Shamim Hasan	Sum/22
Md. Adam Ali Khan (2015-05-3524)	Status and impact of Latiraj Panikachu ( <i>Colocasia esculenta</i> L) cultivation on financial security of farmers of Mymensingh district	Dr. Shaikh Shamim Hasan	Sum/22
Fatema-Tuj-Shanu (16-05-3882)	Problems and prospects of pineapple production in Madhupur, Tangail	Dr. Shaikh Shamim Hasan	Aut/22
Nuruzzaman (16-05-4079)	Community Based Rice Seed Entrepreneurship Model in Bangladesh: Current Status, Challenges and Opportunities	Dr. Md. Safiul Islam Afrad	Aut/22



Amlan Biswas (16-05-4082)	Miller-Farmer Preference in Selecting Promising Rice Varieties in Bangladesh	Dr. Md. Safiul Islam Afrad	Aut/22
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### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Shaikh Shamim Hasan Co-PI: Dr. Md. Abiar Rahman	Status of the current practices and challenges of implementing outcome-based education (OBE) in some selected universities of Bangladesh	Bangladesh Accreditation Council (BAC) BDT 300000	2022
PI: Dr. Shaikh Shamim Hasan Co-PI: Soumitra Saha	Assessment of ecosystem services and their drivers of change under human-dominated pressure in the hilly areas of Bandarban district, Bangladesh	NST, MoST BDT 250000/-	2022
PI: Dr. Shaikh Shamim Hasan Co-PI: Dr. Foyez Ahmed Prodhan	Assessing adoption, challenges and dissemination in small scale faming of Cashew nut in the Chattogram Hill Tracts (CHT) of Bangladesh	RMW, BSMRAU BDT: 900000/-	2021
PI: Prof. Mohammed Rokonzaman	A Quest for finding out Sustainable Agricultural Program for the Smallholder Farmers in Bangladesh	RMW, BSMRAU BDT 500000/-	2021
PI: Dr. Muhammad Ziaul Hoque Co-PI: Dr. Md. Safiul Islam Afrad	Assessment of Residents' Perception on Land Use Dynamics and Urban Agriculture of Dhaka Metropolitan Area	RMW, BSMRAU BDT 900000/-	2021
PI: Dr. Muhammad Ziaul Hoque Co-PI: Shahriar Hasan	Farmers' Perception towards Good Agricultural Practices in Aromatic Rice Production in Dinajpur District	MoST, GoB BDT 250000/-	2022
PI: Dr. Muhammad Ziaul Hoque	Valuation of Cultural Ecosystem Services of Coastal Greenbelt Area and <i>Attributes Important for Continued Supply</i>	UGC BDT 300000/-	2022
PI: Dr. Foyez Ahmed Prodhan Co-PI: Dr. Md. Enamul Haqqe	Household Vulnerability and Agricultural Adaptation Strategies under Changing Climate Conditions: The Case of the Lower Teesta River Basin of Bangladesh	MoST, GoB BDT 250000/-	2022
PI: Dr. Foyez Ahmed Prodhan Co-PI: Dr. Md. Enamul Haque	Projection of suitable tea growing areas in northern Bangladesh under changing climate scenarios	RMW, BSMRAU BDT 830000/-	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. Md. Safiul Islam Afrad Co-PI: Dr. GKM Mustafizur Rahman	Diffusion of Innovative Soil Management Practices in Charlands of Bangladesh	KGF BDT 7121150/-	2022



PI: Dr. Shaikh Shamim Hasan Co-PI: Soumitra Saha	Assessing the extent of tobacco cultivation in CHT and its impact on human health and environment	MoST, GoB BDT 200000/-	2022
PI: Dr. Muhammad Ziaul Hoque Co-PI: Md. Enamul Haque	Assessing Farmers' Perception of Climate Change, Climate Smart Agriculture Adoption, and Food Security in Riverine and Coastal Charlands	MoST, GoB BDT 200000/-	2022
PI: Shahriar Hasan	Identify Problems and Suggest Possible Solutions for Safe Pineapple Production in Madhupur Tract	RMC, BSMRAU BDT 100000/-	2022
PI: Soumitra Saha	Assessing the Drivers of Ecosystem Service Change in Madhupur Sal forest	RMC, BSMRAU BDT 100000/-	2022
PI: Soumitra Saha	Assessing the impacts of land use change and urbanization on ecosystem services of Bhawal Sal Forest Gazipur.	NST BDT 75000/-	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Safiul Islam Afrad	UGC-SAP International Seminar on Development Cooperation between India and Neighboring Countries: Possibilities and Challenges	22-24 March 2022	Tripura, India	Chaired two (2) Technical Sessions Special lecture on <i>Use of Bloom's Taxonomy of Education in Teaching-Learning</i>
Dr. Md. Safiul Islam Afrad	Australia Pacific Extension Network (APEN) Conference	9-11 February 2022	Melbourne Australia	Presenter
Dr. Md. Safiul Islam Afrad	International Rural Sociology Association Conference	19-22 July 2022	Cairns, Australia	Presenter
Dr. Md. Safiul Islam Afrad	2 <sup>nd</sup> Global Conference on Agriculture and Horticulture (AGGRi)	September 01-03, 2022	Paris French	Presenter Moderator
Prof. Dr. Shaikh Shamim Hasan	Land use change knowledge (Application of LU Modelling). Joint Cooperation Programme (JCP) and GED. JCP for Bangladesh Netherlands	17.09.2022	Bangladesh	Trainer
Dr. Muhammad Ziaul Hoque	National integrity strategy, IQAC, BSMRAU	24 October 2022	Bangladesh	Participant



Dr. Foyez Ahmed Prodhan	National integrity strategy, IQAC, BSMRAU	24 October 2022	Bangladesh	Participant
Dr. Foyez Ahmed Prodhan	Resource & Environment Scientific Data Sharing and Disaster Risk Reduction	20-24 November 2022	China (Online)	Participant
Dr. Foyez Ahmed Prodhan	GIS Technology and Application	30 November-2 December	China (Online)	Participant
Dr. Foyez Ahmed Prodhan	Theory and Methods of Land Surface Remote Sensing Inversion	11-12 July 2022	China (Online)	Participant
Shahriar Hasan	UGC-SAP International Seminar on Development Cooperation between India and Neighboring Countries: Possibilities and Challenges	22-24 March 2022	Tripura, India	Presenter
Soumitra Saha	Academic Exposure Training and Vist- International Youth Exchange Program-2022	2022	India	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Enamul Haque	Dean, Agriculture Faculty	14 June 2021-till date
Dr. Muhammad Ziaul Hoque	Assistant Provost, Shaheed Tajuddin Ahmad Hall	Feb 2021-till date
Dr. Foyez Ahmed Prodhan	Assistant Provost, Bangamata Sheikh Fazilatunnesa Mujib Hall	18.11.2021- till date

### List of Publication by the Members of the Department

#### a) Journal

- Afrad, M. S. I., Galib, A. H., Haque, M. E., Zakaria, M., Sakib, M. H., Rahman, M. M., & Shoily, A. A. (2022). Assessing the Overall Efficiency of Two Technologies of Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh. *Journal of Extension Education*, 32(4),6584-6594. <https://doi.org/10.26725/JEE.2020.4.32.6584-6594>
- Afrad, M. S. I., Rahman, G. K. M. M., Alam, M. M., Ali, M. Z., & Barau, A. A. (2022). Organic Amendments Influence the Yield of Vegetables and Soil Properties at Charlands in Bangladesh. *Asian Journal of Advances in Agricultural Research*, 18(1), 9-21. <https://doi.org/10.9734/ajaar/2022/v18i130208>
- Afrad, M. S. I., Rahman, G. K. M. M., Alam, M. S., Ali, M. Z., & Barau, A. A. (2022). Effects of organic amendments on yield performance of winter and summer seasons vegetables at Charlands in Bangladesh. *Annals of Plant Sciences*,11(1), 4628-4647. <https://journalajaar.com/index.php/AJAAR/article/view/30198>
- Ahmed, M., Rahman, A., Hoque, M. Z., Hossain, M., & Matsumoto, M. (2022). Assessment of Ecological Risk Through Toxic Heavy Metal Contamination in Konabari Terrace Industrial Area of Gazipur, Bangladesh. *Journal of the Faculty of Agriculture, Kyushu University*, 67 (1), 33-38.





- Ahmed, N., Wang, G., Booij, M. J., Marhaento, H., Prodhan, F. A., Ali, S., Munir, S., & Hashmi, M. Z. (2022). Variations in hydrological variables using distributed hydrological model in permafrost environment. *Ecological Indicators*, 145, 109609.
- Ahmed, N., Wang, G., Lü, H., Booij, M. J., Marhaento, H., Prodhan, F. A., Ali, S., & Imran, M. A. (2022). Attribution of Changes in Streamflow to Climate Change and Land Cover Change in Yangtze River Source Region, China. *Water*, 14(2), 259.
- Cao, D., Zhang, J., Han, J., Zhang, T., Yang, S., Xun, L., Prodhan, F. A., & Yao, F. (2022). Projected increases in global terrestrial net primary productivity loss caused by drought under climate change. *Earth's Future*, e2022EF002681.
- Chakma, S., Haque, M., Hoque, M. Z., Hossain, M., Afrad, M., Islam, S., Saha, Prodhan, F.A., Hasan, S.S., & Choudhury, J. (2022). Adapting Land Degradation and Enhancing Ethnic Livelihood Security Through Fruit Production: Evidence from Hilly Areas of Bangladesh. In *Agro-biodiversity and Agri-ecosystem Management* (pp. 217-238). Springer, Singapore.
- Han, J., Zhang, J., Yang, S., Cao, D., Prodhan, F. A., & Sharma, T. P. P. (2022). A new composite index for global soil plant atmosphere continuum drought monitoring combining remote-sensing based terrestrial water storage and vapor pressure deficit anomalies. *Journal of Hydrology*, 128622.
- Hasan, S., Hasan, S. S., Saha, S., & Islam, M. R. (2022). Identify Problems and Suggest Possible Solutions for Safe Pineapple Production in Madhupur Tract. *European Journal of Agriculture and Food Sciences*. 4 (5), 68-74. doi: 0.24018/ejfood.2022.4.5.564
- Hasan, J., Shaha, D. C., Kundu, S. R., Yusoff, M. F., Cho, Y. K., Haque, F., Salam, M. A., Ahmed, S., Wahab, M. A., Ahmed, M., Hossain, M. I., & Afrad, M. S. I. (2022). Phytoplankton Community in Relation to Environmental Variables in the Tidal Mangrove Creeks of the Pasur River Estuary, Bangladesh. *Conservation*, 2, 587–612. <https://doi.org/10.3390/conservation2040039>
- Hena, H., Khanam, M., Rahman, G. K. M. M., Afrad, M. S. I., & Alam. M. S. (2022). Isolation and Characterization of Salt Tolerant Bacteria from Saline Soils of Bangladesh. *Eurasian Journal of Soil Science*, 11(4), 284 – 294. <https://doi.org/10.18393/ejss.1108521>
- Hoque, M. Z., Ahmed, M., Islam, I., Cui, S., Xu, L., Prodhan, F. A., Ahmed, S., Rahman, M.A., & Hasan, J. (2022). Monitoring Changes in Land Use Land Cover and Ecosystem Service Values of Dynamic Saltwater and Freshwater Systems in Coastal Bangladesh by Geospatial Techniques. *Water*, 14(15), 2293.
- Hoque, M. Z., Ahmed, M., Islam, I., Cui, S., Xu, L., Prodhan, F. A., Ahmed, S., Rahman, M. A., & Hasan, J. (2022). Monitoring Changes in Land Use Land Cover and Ecosystem Service Values of Dynamic Saltwater and Freshwater Systems in Coastal Bangladesh by Geospatial Techniques. *Water*, 14(15), 2293.
- Hoque, M. Z., Islam, I., Ahmed, M., Hasan, S. S., & Prodhan, F. A. (2022). Spatio-temporal changes of land use land cover and ecosystem service values in coastal Bangladesh. *The Egyptian Journal of Remote Sensing and Space Science*, 25(1), 173-180.
- Hossain, M. E., Islam, M. S., Rana, M. J., Amin, M. R., Rokonuzzaman, M., Chakroborty, S., & Saha, S. M. (2022). Scaling the changes in lifestyle, attitude, and behavioral patterns among COVID-19 vaccinated people: insights from Bangladesh. *Human Vaccines & Immunotherapeutics*, 18(1), 2022920.
- Islam, I., Cui, S., Hoque, M. Z., Abdullah, H. M., Tonny, K. F., Ahmed, M., ... & Ding, S. (2022). Dynamics of Tree outside Forest Land Cover Development and Ecosystem Carbon Storage Change in Eastern Coastal Zone, Bangladesh. *Land*, 11(1), 76.
- Jannat, S. T., Afrad, M. S. I., Haque, M. E., Hasan, S. S., & Ivy, N. A. (2022). Constraints in Cultivating BARI alu25 (Asterix) in Munshiganj and Rangpur Districts of Bangladesh, *Ecology Journal*, 4 (1), 29-36.
- Mahamud, T. A., Hasan, S. S., Ghosh M. K., & Chakma, P. (2022). Assessing farmers' awareness towards



- climate change in the middle part of Bangladesh. *Geografia Malaysian Journal of Society and Space*. 18 (1), 01-14. doi: 10.17576/geo-2022-1801-01
- Prodhan, F. A., Zhang, J., Hasan, S. S., Sharma, T. P. P., & Mohana, H. P. (2022). A review of machine learning methods for drought hazard monitoring and forecasting: Current research trends, challenges, and future research directions. *Environmental Modelling & Software*, 105327.
- Prodhan, F. A., Zhang, J., Sharma, T. P. P., Nanzad, L., Zhang, D., Seka, A. M., Ahmed, N., Hasan, S. S., Hoque, M. Z., & Mohana, H. P. (2022). Projection of future drought and its impact on simulated crop yield over South Asia using ensemble machine learning approach. *Science of The Total Environment*, 807, 151029.
- Rokonuzzaman, M. (2022). Conditional Cash Transfer: Female Secondary School Assistance Programme (FSSAP) - Case in Bangladesh. *International Journal of Social Science and Economic Research*. 7(3), 581-591.
- Rokonuzzaman, M., Shimul, M. T. N., Hasan, S. S., Khan, M. A. R., Rana J., & Bhuiyan, M. A. (2022). Study on the Causes and Impact of Migration in Garo People Lifestyle. *Turkish Journal of Agriculture – Food Science and Technology*. 10(6), 1026-1033. doi: 10.24925/turjaf.v10i6.1026-1033.4788
- Saha, S., Hasan, S. S., Hasan, S., Sadi, R.S., Labib, M. T. R., & Saha, S. (2022). Ecosystem service preference of forest people: A study in Madhupur Sal Forest of Bangladesh. *European Journal of Agriculture and Food Sciences*. 4 (6), 20-25. doi: 0.24018/ejfood.2022.4.6.583
- Seka, A. M., Zhang, J., Ayele, G. T., Demeke, Y. G., Han, J., & Prodhan, F. A. (2022). Spatio-temporal analysis of water storage variation and temporal correlations in the East Africa Lake basins. *Journal of Hydrology: Regional Studies*, 41, 101094
- Seka, A. M., Zhang, J., Prodhan, F. A., Ayele, G. T., Finsa, M. M., Sharma, T. P. P., & Melesse, A. M. (2022). Hydrological drought impacts on water storage variations: a focus on the role of vegetation changes in the East Africa region. A systematic review. *Environmental Science and Pollution Research*, 1-20.
- Seka, A. M., Zhang, J., Zhang, D., Ayele, E. G., Han, J., Prodhan, F. A., Zhang, G., & Liu, Q. (2022). Hydrological drought evaluation using GRACE satellite-based drought index over the lake basins, East Africa. *Science of The Total Environment*, 852, 158425.
- Van Haren, C., Van Eupen, M., Verweij, P., Vittek, M., Islam, S., Terwisscha van Scheltinga, C., Hasan, S. S., Saha, C. R., Banik, A., Rashid, M. A., Moghayer, S., & Herens, M. (2022). Land Use Classification Bangladesh. Combining and downscaling existing databases. Technical Report: 3196, *Wageningen Environmental Research*, Wageningen, The Netherlands.

## b) Book/Book Chapter

- Barau, A. A., & Afrad, M. S. I. (2022). Rural Women Participation in Livelihood Sustenance: A Snapshot of Bangladesh Perspective. In: Choudhury, J. (Ed.). *Engendering Budget for Gender Equality: India and Bangladesh Perspectives*, (pp. 205-221), DPS Publishing House, New Delhi. [www.dpspublishinghouse.com](http://www.dpspublishinghouse.com)
- Chakma, P., Afrad, M. S. I., Reza, A., Lee, S. G., Ansary, M. W. R., Sakib M. H., & Bhattacharjee, D. (2022). Aboriginal Women Participation in Traditional Shifting Cultivation of Bangladesh. In: Choudhury, J. (Ed.). *Engendering Budget for Gender Equality: India and Bangladesh Perspectives*, (pp. 233-250), DPS Publishing House, New Delhi. [www.dpspublishinghouse.com](http://www.dpspublishinghouse.com)
- Chakma, S., Haque, M. E., Hoque, M. Z., Hossain, M. M., Afrad, M. S. I., Saha, S., Prodhan, F. A., Hasan, S. S., & Choudhury, J. (2022). Adapting Land Degradation and Enhancing Ethnic Livelihood Security through Fruit Production: Evidence from Hilly Areas of Bangladesh. In: Kumar, P., Tomar, R.S., Bhat, J.A., Dobriyal, M., Rani, M. (Eds.). *Agro-biodiversity and Agri-ecosystem Management*, (pp. 217-238). Springer, Singapore. [https://doi.org/10.1007/978-981-19-0928-3\\_11](https://doi.org/10.1007/978-981-19-0928-3_11)



### Postgraduate Student's Information

Program	Number
MS	07
PhD	-
Total =	07

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AER 311	Introductory Agricultural Extension	3	4.5	Dr. Md. Safiul Islam Afrad Shahriar Hasan
	AER 301	Management of Agricultural Extension Organizations	3	4.5	Dr. Md. Enamul Haque Dr. Foyez Ahmed Prodhon
Autumn	AER 440	Communication and Technology Transfer	4	4.5	Dr. Md. Safiul Islam Afrad Dr. Muhammad Ziaul Hoque
	AER 431	Fisheries Extension	4	4.5	Dr. Shaikh Shamim Hasan Soumitra Saha
	AER 155	Fundamentals of Agricultural Extension & Rural Development	1	4.5	Dr. Md. Enamul Haque Dr. Foyez Ahmed Prodhon
Winter	AER 361	Rural Sociology	3	3	Dr. Md. Safiul Islam Afrad Dr. Md. Enamul Haque
	AER 265	Rural Sociology and Educational Psychology	2	2.0	Dr. Muhammad Ziaul Hoque Soumitra Saha
	AER 461	Veterinary Extension Education	4	4.5	Dr. Shaikh Shamim Hasan Dr. Farhana Yeasmin

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AER 670	Philosophy of Rural Development	MS & PhD	3.0	Dr. Md. Safiul Islam Afrad
	AER 510	Research Methodology in Extension Education	MS & PhD	3.0	Dr. Muhammad Ziaul Hoque
Autumn	AER 665	Data Analysis and Interpretation in Extension Education	MS & PhD	3.0	Dr. Muhammad Ziaul Hoque Dr. Foyez Ahmed Prodhon
	AER 545	Community Development	MS & PhD	3.0	Dr. Shaikh Shamim Hasan



## Department of Agronomy

<https://bsmrau.edu.bd/agr/>

### Faculty Members

#### Professors

Dr. M. Abdul Karim  
Dr. M. Moynul Haque  
Md. Nasimul Bari  
Dr. Md. Rafiqul Islam  
Dr. M. A. Mannan  
Dr. Md. Moshiul Islam  
Dr. Md. Arifur Rahman Khan

#### Associate Professors

Dr. Md. Abdullah Al Mamun  
Nurunnaher Akter (Study leave)

#### Assistant Professors

Erin Zaman  
Munny Akter  
Uttam Kumer Ghosh

#### Lecturer

Md. Saddam Hossain

#### Officers and Staff

Name	Designation
Md. Faruque Hossain Mollah	Deputy Registrar (PRL)
Md. Yakub Ali	Senior Assistant (Lab)
Md. Sarbbir Al Amin Mondal	Senior Assistant
Shafi Uddin	Senior M.L.S.S

#### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Moutusi Mondal (2015-05-3516)	Evaluation of Sowing Time and Planting Techniques on Stand Establishment of Sunflower in Coastal Saline Soil of Bangladesh	Dr. Md. Rafiqul Islam	Sum/22
Fakir Mahmud Shraban (2015-05-3522)	Valuation of Growth and Yield Performance of Selected Advanced Lines of T. Aman rice	Dr. Md. Arifur Rahman Khan	Sum/22
Afiya Tahmin Binte Asad (2016-053827)	Effects of Calcium for Drought Amelioration in Rice	Dr. Md. Moshiul Islam	Sum/22



Anamika (2016-05-3841)	Effects of Different Levels of Potassium on Growth, Yield and Nutrient Content of Blackgram	Dr. Md. Moshiul Islam	Sum/22
Foysal Iqbal (2019-08-5315)	Effect of Waste-water Contaminated Soil on Growth, Yield and Quality on Rice	Dr. M. A. Mannan	Sum/22
Md. Shahriar-Tareq (2019-08-5336)	Growth, Yield and Physiological Responses of Soybean Genotypes to Salinity	Dr. M. Abdul Karim	Sum/22
Md. Farhad Ali (2020-05-5697)	Growth and Productivity of Aus rice Progenies under Partial Irrigated Condition	Dr. M. Moynul Haque	Sum/22
Kamrun Naher Zumur (2020-05-5706)	Genetic Analysis for Yield and Yield Attributes of F2 Population of Rice	Dr. Md. Moshiul Islam	Sum/22
Md. Najmul Huda (2019-08-5314)	Effect of Seaweed Extracts on Growth, Yield and Seed Quality of Mungbean	Dr. M.A. Mannan	Aut/22
Abdul Awal Rahim (2016-05-3817)	Performance of Selected Wheat Genotypes for Disease Tolerance and Higher Yield	Dr. Md. Moshiul Islam	Aut/22
Fetema Johora Prity (2016-05-3860)	Screening of Short Duration Promising Advanced Lines of Aman rice under Rainfed Condition	Dr. Md. Moshiul Islam	Aut/22
Khusnud Alam (2016-05-3890)	Photosynthesis, Dry Matter Partitioning and Yield Performance of Selected Advanced Lines of Blackgram	Dr. M. Moynul Haque	Aut/22
Samia Hossain Srabony (2016-05-3870)	Morpho-physiological Mechanism for Increasing Rice Yield in Response to Nitrogen Management	Dr. Md. Abdullah Al Mamun	Aut/22
Shaikat Mitra (2016-05-3854)	Performance of growth, yield and yield contributing characters of selected mungbean genotypes	Dr. Md. Moshiul Islam	Win/22
Tasnim Akter Neon (2016-05-3904)	Phenotypic Variation in Black Gram Line under Pot Culture	Dr. M. Moynul Haque	Win/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. M. A. Karim	Selection, validation and evaluation of some physiological characteristics of salt tolerant soybean genotypes	RMW, BSMRAU Tk. 3.0 lakh	2020
Dr. M. A. Karim	Selection, validation and elucidation of physiological mechanisms of waterlogging tolerant short duration dwarf soybean genotypes	MoST, GoB, Tk. 2.5 lakh	2022



Dr. M. A. Karim	Adaptation trial of promising salt tolerant soybean genotypes in coastal region of Bangladesh	KGF-BARC Tk. 9.9 lakh	2022
Dr. M. Moynul Haque	Adaptability trial of promising saline tolerant wheat genotypes in coastal region of Bangladesh	KGF-BARC Tk. 2.65 lakh	2020
Dr. M. Moynul Haque	Yield enhancement of local aman rice under late transplanting condition	MoST, GoB, Tk. 4.5 lakh	2022
Mr. M. Nasimul Bari	Evaluate of the effect of parthenium weed an agriculture, ecosystem and health in Bangladesh	RMC, BSMRAU Tk. 8.3 lakh	2022
Dr. Md. Rafiqul Islam	Exploring the status and potentials of minor cereals in Bangladesh	KGF-BARC Tk. 10.0 lakh	2021
Dr. Md. Rafiqul Islam	Ecophysiology of iron toxicity tolerance in rice	MoST, GoB, Tk. 2.5 lakh	2022
Dr. M. A. Mannan	Improvement of drought tolerant maize variety	RMW, BSMRAU Tk. 6.6 lakh	2020
Dr. M. A. Mannan	Performance of zinc biofortified rice varieties in zinc deficient soil and improve yield, nutrition, seed and seedling quality through agronomic intervention	UGC Tk. 3.0 lakh	2022
Dr. M. A. Mannan	Assessment of sesame genotypes for salt tolerance based on agronomic and physiological markers	MoST, GoB, Tk. 2.5 lakh	2022
Dr. Md. Moshiul Islam	Development and characterization of drought tolerant, short duration promising advanced lines of rice	RMW, BSMRAU Tk. 1.4 lakh	2020
Dr. Md. Arifur Rahman Khan	Development of high yielding Aus rice genotypes	RMW, BSMRAU Tk. 3.2 lakh	2020
Dr. Md. Arifur Rahman Khan	Preliminary and multilocation yield trial of advanced lines of aman rice	MoST, GoB, Tk. 3.0 lakh	2022
Dr. Md. Abdullah Al Mamun	Improving farm productivity in unfavorable tidal flooded coastal region of Bangladesh	BANBEIS, GoB, Tk. 20.45 lakh	2020
Dr. Md. Abdullah Al Mamun	Agronomic management strategy to enhance growth, survival and productivity of rice under submergence condition	MoST, GoB, Tk. 2.5 lakh	2022

#### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. M. A. Karim	Selection, validation and elucidation of physiological mechanisms of waterlogging tolerant short duration dwarf soybean genotypes	MoST, GoB, Tk. 2.5 lakh	2021



Dr. M. A. Mannan	Evaluation of sesame genotypes for tolerance to waterlogging	MoST, GoB, Tk. 2.0 lakh	2021
Dr. Md. Arifur Rahman Khan	Evaluation of genotypic variation in growth and yield performance of advanced lines of Aman rice	MoST, GoB, Tk. 2.0 lakh	2021
Dr. Md. Abdullah Al Mamun	Eco-physiological mechanism for tolerance to submergence in rice	MoST, GoB, Tk. 2.0 lakh	2021
Dr. Md. Rafiqul Islam	Spatial database creation and crop suitability assessment for enhancing crop production in Sylhet haor basin using remote sensing and GIS	MoST, GoB, Tk. 2.0 lakh	2021
Dr. M. Moynul Haque	Yield enhancement of local aman rice under late transplanting condition	MoST, GoB, Tk. 2.5 lakh	2021

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Md. Saddam Hossain	Training on Statistical Data Analysis	27-28 Nov, 2022	Bangladesh	Trainee
Md. Saddam Hossain	গুদাচার বিষয়ক প্রশিক্ষণ	29 Sep, 2022	Bangladesh	Trainee
Md. Saddam Hossain	Scientific writing	13-17 Feb, 2022	Bangladesh	Trainee
Erin Zaman	Training on Statistical Data Analysis	27-28 Nov, 2022	Bangladesh	Trainee
Uttam Kumer Ghosh	Training on Statistical Data Analysis	27-28 Nov, 2022	Bangladesh	Trainee

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. M. Moynul Haque	Director, Planning and Development	12-12-2020 to date
Mr. M. Nasimul Bari	Head, Department of Agrometeorology	01-08-2022 to date
Dr. Md. Arifur Rahman Khan	Proctor	01-01-2017 to date
Dr. Md. Abdullah Al Mamun	Head, Department of Agronomy	01-01-2021 to 31-12-2022

### List of Publication by the Members of the Department

#### a) Journal

Akter, M., Mahmud, A., Akter, M., Siddiqui, M. N., & Khan, M. A. R. (2022). Dissecting the salt tolerance potential of cowpea genotypes based on morpho-physiology and yield-related attributes. *Annals of Applied Biology*, 180(3), 428-437.

Dola, D. B., & Mannan, M. A. (2022). Efficient Use of Ground Water for Sustainable Agricultural Production: Prospects in Bangladesh. *Ecology Journal*, 4(2), 195-204.



- Dola, D. B., Mannan, M. A., Sarker, U., Mamun, M. A. A., Islam, T., Ercisli, S., Ali, B., Saleem, M. H., Pop, O. L., & Marc, R. A. (2022). Nano-iron oxide accelerates growth, yield, and quality of *Glycine max* seed in water-deficits. *Frontiers in Plant Science*, 13, 992535. doi: 10.3389/fpls.2022.992535.
- Fairoj, S. A., Islam, M. M., Islam, M. A., Zaman, E., Momtaz, M. B., Hossain, M. S., Jahan, N. A., Shams, S. N. U., Urmi, T. A., Rasel, M. A., Khan, M. A. R., Kamal, M. Z. U., Rahman, G. K. M. M., Bari, M. N., Haque, M. M., & Murata, Y. (2022). Salicylic acid improves agro-morphology, yield and ion accumulation of two wheat (*Triticum aestivum* L.) genotypes by ameliorating the impact of salt stress. *Agronomy*, 13(1), 25.
- Ghosh, U.K., Islam, M. N., Siddiqui, M. N., Cao, X., & Khan, M. A. R. (2022). Proline, a multifaceted signalling molecule in plant responses to abiotic stress: understanding the physiological mechanisms. *Plant Biology*, 24(2), 227-239.
- Habib, M. A., Mannan, M. A., Karim, M. A., Mamun, M. A. A., Dola, D. B., Miah, M. Y., Miah, M. M. U., Ferdous, J., & Singh, H. P. (2022). Water deficit stress tolerance assesment in barley cultivars using drought tolerance indices. *Journal of Agriculture and Crops*, 8(4), 228-235. doi: 10.32861/jac.84.228.235.
- Hossain, M. A., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M. M., Khan, M. A. R., Biswas, J. C., & Karim, M. A. (2022). Rice growth and yield characteristics under elevated carbon dioxide and nitrogen management. *Agronomy Research*, 20(S1), 965-976. doi: 10.15159/AR.22.060
- Hossain, M. S., Islam, M. N., Rahman, M., M., Mostofa, M. G., & Khan, M. A. R. (2022). Sorghum: A prospective crop for climatic vulnerability, food and nutritional security. *Journal of Agriculture Food Research*, 8(20), 100300.
- Islam, M. R., Islam, M. S., Akter, N., Mohi-Ud-Din, M., & Mostofa, M.G. (2022). Foliar Application of Cytokinin Modulates Gas Exchange Features, Water Relation and Biochemical Responses to Improve Growth Performance of Maize under Drought Stress. *Phyton-International Journal of Experimental Botany*, 91(3),633-649.
- Islam, M. R., Rahman, M. M., Mohi-Ud-Din, M., Akter, M., Erin, Z., Keya, S. S., Hasan, M., & Mirza, H. (2022). Cytokinin and gibberellic acid-mediated waterlogging tolerance of mungbean (*Vigna radiata* Wilczek). *Peer J*, 1-16.
- Jahan, N., Ahamed, T., Das, A., Khan, M., Hossain, S., Sarker, S. R., & Shawan. M. M. A. K. (2022). In silico subtractive genomics approach characterizes a hypothetical protein (MG\_476) from microplasma genitalium G37. *Journal of Clinical & Experimental Investigations*, 13(4), 1-10.
- Kalaji, H. M., Urmi, T. A., Rahman, M. M., Islam, M. M., Islam, M. A., Jahan, N. A., Mia, M. A. B., Akhter, S., & Siddiqui, M. H. (2022). Integrated Nutrient Management for Rice Yield, Soil Fertility, and Carbon Sequestration. *Plants*, 11(1), 1-17.
- Mamun, M. A. A., Julekha, Sarker, U., Mannan, M. A., Rahman, M. M., Karim, M. A., Ercisli, S., Marc, R. A., & Golokhvast, K. S. (2022). Application of potassium after waterlogging improves quality and productivity of soybean seeds. *Life*, 12, 1816. doi: 10.3390/life12111816.
- Mamun, M. A. A., Mannan, M. A., & Karim, M. A. (2022). Location specific field performance of aman rice cultivars in tidal flood prone ecosystem of Bangladesh. *Agronomy Research*, 20(S1), 1014-1025. doi: 10.15159/AR.22.072.
- Mannan, M. A., Tithi, M. A., Islam, M. R., Mamun, M. A. A., Mia, S., Rahman, M. Z., Awad, M. F., ElSayed, A. I., & Hossain, M. S. (2022). Soil and foliar applications of zinc sulphate and iron sulfate alleviate the destructive impact of drought stress in wheat. *Cereal Research Communications*, 50, 1279-1289. doi: 10.1007/s42976-022-00262-5.
- Miah, M. G., Islam, M. R., & Roy, J. *et al.* (2022). A changing coastal ecosystem: Cox's Bazar in southeastern coastal region of Bangladesh. *Environment, Development and Sustainability*, <https://>





doi.org/10.1007/s10668-022-02297-4.

- Nath, S.C.D., Masud, A. A. C., Rahman, M., Saha, T., Sathi, K. S., Rahman, A., Khan, M., Hossain, A., & Hasanuzzaman, M. (2022). Supplemental Organic Manures and Foliar Application of Magic Growth Improve the Productivity of Transplanted Rice with Reduced Application of Chemical Fertilizers. *Agriculturae Conspectus Scientificus*, 87(2), 111-120.
- Putul, F. B., Hossain, M. S., Ahamed, T., Akter, M., & Khan, M. A. R. (2022). Effect of phosphorus on growth and yield traits of cowpea genotypes. *Ecology Journal*, 3(2), 107-113.
- Rahman, M. M., Kamal, M. Z. U., Ranamukhaarachichi, S., Alam, M. S., Alam, M. K., Khan, M. A. R., Islam, M. M., Alam, M. A., Jiban, S. I., Mamun, M. A. A., Abdullah, H. M., Biswas, J. C., Akhter, S., Naher, U. A., Maniruzaman, M., Haque, M. M., & Ahmed, F. (2022). Effects of Organic Amendments on Soil Aggregate Stability, Carbon Sequestration, and Energy Use Efficiency in Wetland Paddy Cultivation. *Sustainability*, 14, 4475. doi: 10.3390/su14084475.
- Rahman, M. M., Mostofa, M. G., Das, A. K., Anik, T. R., Keya, S. S., Ahsan, S. M., Khan, M. A. R., Ahmed, M., Rahman, M. A., Hossain, M. M., & Lam-Son Phan Tran. (2022). Ethanol Positively Modulates Photosynthetic Traits, Antioxidant Defense and Osmoprotectant Levels to Enhance Drought Acclimatization in Soybean. *Antioxidants*, 11(3), 516.
- Rahman, M. S., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M. M., Biswas, J. C., Rubayet, M. T., Karim, M. A., & Miah, M. G. (2022). Rice demands higher nitrogen fertilizer during grain filling stage under elevated atmospheric CO<sub>2</sub> condition. *Australian Journal of Crop Science*, 16(11), 1234-1242. doi: 10.21475/ajcs.22.16.11.
- Rahman, M. S., Mamun, M. A. A., Miah, M. M. U., Rahman, M. M., Biswas, J. C., Rubayet, M. T., Karim, M. A., & Miah, M. G. (2022). Incidence and severity of rice sheath blight disease under elevated carbon dioxide and nitrogen management. *Journal of Plant Biology and Agronomy*, 1(1): 101.
- Rahman, S. H., & Islam, M. (2022). Urban green-space availability and recommended plantation area in Dhaka South City Corporation (DSCC) using RS-GIS. *Bangladesh Journal of Environmental Research*, 13, 1-12.
- Sen, A., Islam, M. M., Zaman, E., Ghosh, U. K., Momtaz, M. B., Islam, M. A., Urmi, T. A., Mamun, M. A. A., Rahman, M. M., Kamal, M. Z. U., Rahman, G. K. M. M., Haque, M. M., & Murata, Y. (2022). Agro-Morphological, yield and biochemical responses of selected wheat (*Triticum aestivum* L.) genotypes to salt stress. *Agronomy*, 12, 3027. doi: 10.3390/agronomy12123027
- Talukder, S., Mamun, M. A. A., Hossain, M. S., Khan, M. A. R., Rahman, M. M., Talukder, M. R., Haque, M. M., & Biswas, J. C. (2022). Duration of low temperature changes physiological and biochemical attributes of rice seedling. *Agronomy Research*, 20(S1), 1163-1176. doi:10.15159/AR.22.051.

#### b) Book/Book Chapter

- Ghosh, U. K., Hossain, M. S., Islam, M. N., & Khan, M. A. R. (2022). Role of tocopherol in conferring abiotic stress tolerance in plants. In *Antioxidant Defense in Plants: Molecular Basis of Regulation*. Springer Nature, Singapore. pp. 215-233.
- Mannan, M. A., Rima, I. A., & Karim, M. A. (2022). Physiological and biochemical basis of stress tolerance in soybean. *Soybean- Recent Advances in and Applications*. doi: 10.5772/intechopen.103155, London.
- Rahman, M. M., Alam, M. S., Islam, M. M., Kamal, M. Z. U., Rahman, G. K. M. M., Haque, M. M., Miah, M. G., & Biswas, J. C. (2022). Potential of legume-based cropping systems for climate change adaptation and mitigation. *Advances in Legumes for Sustainable Intensification*, Academic Press, 381-402.

**Postgraduate Student's Information**

Program	Number
MS	37
PhD	2
Total =	39

**Courses Offered by the Department at Undergraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AGR 101	Fundamentals of Agronomy	1st Year (Ag)	2+1	Dr. M. A. Mannan Dr. Md. Abdullah Al Mamun
	AGR 325	Seed Science and Technology	3rd Year	3+1.5	Dr. M. Moynul Haque Dr. Md. Moshiul Islam
Autumn	AGR 255	Agro-climatology	2 <sup>nd</sup> Year	3+1.5	Dr. Md. Moshiul Islam Erin Zaman
	AGR 131	Introductory Agronomy	1st Year (AERD)	3+1	Dr. Md. Arifur Rahman Khan Munny Akter
Winter	AGR 175	Fundamentals of Cereal Crop Production	1 <sup>st</sup> Year	3+1.5	Dr. M. Abdul Karim Dr. Md. Arifur Rahman Khan
	AGR 280	Seed Science and Technology	2nd Year	3+1.5	Dr. M. Moynul Haque Dr. Md. Moshiul Islam
	AGR 375	Production of Pulses, Oilseeds & Industrial Crops	3 <sup>rd</sup> Year	3+1.5	Dr. M. A. Mannan Md. Saddam Hossain
	AGR 475	Irrigation and Farm Management	4 <sup>th</sup> Year	3+1.5	Dr. Md. Rafiqul Islam Dr. Md. Abdullah Al Mamun

**Courses Offered by the Department at Postgraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AGR 507	Principles and Practices of Irrigation	MS & PhD	3.0	Dr. M. A. Mannan
	AGR 560	Laboratory Methods in Agronomy	MS & PhD	3.0	Dr. M. Abdul Karim Dr. Md. Abdullah Al Mamun
Autumn	AGR 516	Principals of Weed Science	MS & PhD	3.0	Md. Nasimul Bari
	AGR 550	Cereal Crop Production	MS & PhD	3.0	Dr. Md. Arifur Rahman Khan



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Winter	AGR 501	Principles of Crop Production	MS & PhD	3.0	Dr. Md. Rafiqul Islam
	AGR 530	Microclimate	MS & PhD	3.0	Dr. M. Moshiul Islam
	AGR 601	Crop Ecology	MS & PhD	3.0	Dr. M. Abdul Karim
	AGR 615	Soil Management and Crop Production	MS & PhD	3.0	Dr. M. A. Mannan
	AGR 662	Weed Management	MS & PhD	3.0	Mr. Md. Nasimul Bari
	AGR/ SST 525	Principals of Seed Science and Technology	MS & PhD	3.0	Dr. M. Moynul Haque

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## Department of Agricultural Engineering

[www.bsmrau.edu.bd/age/](http://www.bsmrau.edu.bd/age/)

### Faculty Members

#### Professor

Dr. Md. Moinul Hosain Oliver

Dr. Md. Mostafizar Rahman

#### Associate Professor

Mr. Khokan Kumar Saha

#### Assistant Professor

Md. Moniruzzaman

Md. Zamil Uddin

### Officers and Staff

Name	Designation
Bikash Sarker	UDA
Abir Hossain Akash	Workshop Assistant

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Md. Mostafizar Rahman	Development of a small power sprayer for field crops	RMW, BSMRAU (TK. 8,50,000)	2021
PI: Dr. Md. Mostafizar Rahman	Development of automated micro irrigation system for fruits and vegetable farming	BAS-USDA (Tk. 31,26,500)	2020

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Md. Zamil Uddin	Estimation of Subsurface Pollutant Load and Its Seasonal Variation in an Irrigation Channel	RMW, BSMRAU (Tk.1,00000)	2022
PI: Md. Moniruzzaman	Determination of Hydraulic characteristics and wind drift potentials of gun-type sprinklers available in Bangladesh	RMW, BSMRAU (Tk. 1,00000)	2021

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Moinul Hosain Oliver	Head, Dept. of AGE	5 October 2022 to date
Md. Moniruzzaman	Assistant Provost, Shaheed Tajuddin Ahmed Hall	01/05/ 2021 to date



## List of Publication by the Members of the Department

### a) Journal

- Molla, A. H., Zahan, H., Oliver, M. M. H., & Mosharaf, M. K. (2022). Exploration of Potential Indigenous Non-phytopathogenic Fungi for Bio-organic Fertilizer Recycling from Organic Waste. *Environment and Natural Resources Journal*, 20. <https://doi.org/10.32526/enrj/20/202200110>
- Saha, K. K., Rahman, A., Rahman, M. M., Syduzzaman, M., Ali., M. A., Riza, D F., Uddin, M. Z., Moniruzzaman, M., & Oliver, M. M. H. (2022). Classification of Starfruit Maturity using Smartphone-image and Multivariate Analysis. *Journal of Agriculture and Food Research*, 11, 100473. <https://doi.org/10.1016/j.jafr.2022.100473>
- Uddin, M. Z., Saha, K. K., Moniruzzaman, M., Rahman, M. M., Ahmed, M., & Oliver M. M. H. (2022). Estimation of Subsurface Pollutant Load and Its Seasonal Variation in an Irrigation Channel. *European Journal of Agriculture and Food Sciences*, 4(6), 54-61. <http://dx.doi.org/10.24018/ejfood.2022.4.6.606>

## Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GEU 101	Communicative English	1	2.0	Dr. Md. Moinul Hosain Oliver
	AGE 261	Farm Mechanics	BS (AERD)	4.0	Dr. Md. Moinul Hosain Oliver Md. Zamil Uddin
Winter	AGE 180	Farm Mechanics	BS (AG)	4.0	Dr. Md. Moinul Hosain Oliver Md. Moniruzzaman
	AGE 261	Farm Mechanics	BS (AERD)	4.0	Dr. Md. Moinul Hosain Oliver Md. Zamil Uddin
	GEU 161	Communicative English	1	2.0	Dr. Md. Moinul Hosain Oliver

## Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AGE 511	Irrigation System Management and Evaluation	MS	3.0	Dr. Moinul Hosain Oliver
	AGE 514	Drainage of Agricultural Lands	MS	3.0	Mr. Khokan Kumar Saha
Autumn	AGE 505	Farm Irrigation System Design	MS	3.0	Dr. Moinul Hosain Oliver
	AGE 522	Open Channel Flow	MS	3.0	Dr. Moinul Hosain Oliver
Winter	AGE 501	Water Resources and Irrigation	MS	3.0	Dr. Md. Mostafizar Rahman Md. Moniruzzaman



## Department of Agro-Processing

[www.bsmrau.edu.bd/agp/](http://www.bsmrau.edu.bd/agp/)

### Faculty Members

#### Professor

Dr. Md. Amdadul Haque

Dr. Md. Ahiduzzaman

#### Associate Professor

Dr. Md. Aslam Ali

#### Assistant Professor

Dr. Md. Nahidul Islam

### Officers and Staff

Name	Designation
Rehana Parvin	Assistant Technical Officer
Abdullah Al Jobair	Lab. Technician
Md. Alamgir Hosen	MLSS

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Prof. Dr. Md. Ahiduzzaman Co-PI: Dr. Md. Nahidul Islam	Innovation of small-scale processing plant for food products from selected fruits	RMW, BMRAU BDT 9,00,000	2020
Prof. Dr. Md. Ahiduzzaman Co-PI: Dr. Md. Durrul Huda	OFANS Theme 4.2: Development of a low-temperature paddy drying/storage system	KGF BDT 86,19,000	
PI: Dr. Md. Nahidul Islam Co-PI: Dr. Afsana Hossain	Advanced coating technologies to improve storage potential of fruits and vegetables of Bangladesh	MoST, GoB BDT 2,50,000	2022
PI: Dr. Md. Nahidul Islam Co-PI: Dr. Md. Ahiduzzaman	Innovative Washing Technology of Fruits and Vegetables for Shelf Life Extension	RMW, BSMRAU BDT 10,00,000	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Ahiduzzaman	Agricultural Mechanization in Bangladesh: Status, Challenges and Opportunities	Oct 3, 2022	NATA, Gazipur, Bangladesh	Keynote Speaker
Dr. Md. Ahiduzzaman	Agricultural and Food Processing in Bangladesh: Status and Opportunities	Nov 18, 2022	IEB, Bangladesh	Keynote Speaker



Dr. Md. Ahiduzzaman	Traditional Vs New Food Processing and Preservation Techniques: Possibilities and Limitations, Challenges, Future Plans	Aug 1, 2022	NATA, Gazipur, Bangladesh	Speaker
Dr. Md. Ahiduzzaman	Food Processing and Preservation by Heat Treatment, Hot Water Treatment, Frying	Aug 1, 2022	NATA, Gazipur, Bangladesh	Speaker
Dr. Md. Aslam Ali	Workshop on SSC (Vocational) 2023 course curriculum for the Trade of Agrobased Food, NCTB, Dhaka	From 23/10/2022 to 27/10/2022	Bangladesh	Expert member
Dr. Md. Nahidul Islam	Overview of Value Addition in Food Business	Aug 1, 2022	NATA, Gazipur, Bangladesh	Speaker
Dr. Md. Nahidul Islam	Overview on Food Processing and Preservation Techniques	Aug 1, 2022	NATA, Gazipur, Bangladesh	Speaker
Dr. Md. Nahidul Islam	Agricultural Mechanization in Bangladesh: Status, Challenges and Opportunities	Oct 3, 2022	NATA, Gazipur, Bangladesh	Participant
Dr. Md. Nahidul Islam	শুধাচার সংক্রান্ত প্রশিক্ষণ	Sep 29, 2022	IQAC, BSMRAU	Participant
Dr. Md. Nahidul Islam	Training on Statistical Analysis	Nov 27-28, 2022	IQAC, BSMRAU	Participant
Dr. Md. Nahidul Islam	Systematic Literature Review and Referencing with MENDELEY Software	Dec 26-27, 2022	SUST (Zoom)	Participant
Dr. Md. Nahidul Islam	Mass Spectrometry Training	December 29-31, 2022	Kennesaw State University (Zoom)	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Ahiduzzaman	Associate Director (Planning & Development)	Jan-Dec 2022
Dr. Md. Ahiduzzaman	Head, Department of Agro-Processing	Jan-Dec 2022
Dr. Md. Nahidul Islam	Member, Transport Repair and Maintenance Committee	Feb-Dec 2022
Dr. Md. Nahidul Islam	Assistant Provost, Shaheed Ahsanullah Master Hall,	Oct-Dec 2022

### List of Publication by the Members of the Department

#### a) Journal

Ahiduzzaman, M., & Islam, A. K. M. A. (2022). Rice Bran: A Reliable Source of Edible Oil and Animal Feed in Bangladesh. *J. Agril. Engg (IEB)*, 44 (2), 61-68.



- Ahmed, S., Akther, S., Alam, S. S., Ahiduzzaman M., Islam, M. N., & Azam, M. S. (2022). Individual and combined effects of electrolyzed water and ultrasound treatment on microbial decontamination and shelf-life extension of fruits and vegetables: A review of potential mechanisms. *Journal of Food Processing and Preservation*, e16765.
- Alam, S., Ahiduzzaman, M., Islam, M. N., Haque, M. A., & Akanda, M. A. M. (2022). Formulation and senso-chemical evaluation of aloe vera (*Aloe barbadensis miller*) based value added beverages. *Annals of Bangladesh Agriculture*, 25(1), 43-54.
- Ali, M. A., Kamal, M. M., Rahman, M. H., Siddiqui, M. N., Haque, M. A., Saha, K. K., & Rahman, M. A. (2022). Functional dairy products as a source of bioactive peptides and probiotics: Current trends and future perspectives. *Journal of Food Science and Technology*, 59(4), 1263-1279.
- Ali, M. A., Saha, K. K., Choudhury, M. S., Ahiduzzaman, M., & Islam, M. N. (2022). Formulation, senso-chemical analysis and shelf-life study of biscuits using stevia leaf as the substitute for sugar. *Asian Journal of Dairy and Food Research*, 41(4), 424-430. DOI: 10.18805/ajdfr.DRF-253
- Azam, M. S., Wahiduzzaman, M., Reyad-ul-Ferdous, M., Islam, M. N., & Roy, M. (2022). Inhibition of Insulin Degrading Enzyme to Control Diabetes Mellitus and its Applications on some Other Chronic Disease: a Critical Review. *Pharmaceutical Research*.
- Cao, X., Azam, M. S., & Islam, M. N. (2022). Effect of chitosan and hydroxypropyl starch complex polysaccharide on the physico-chemical properties of Tilapia fish (*Oreochromis mossambicus*) gel. *Food Research*, 6(5), 340-348.
- Cao, X., Qianqian, H., Cong, Y., Azam, M. S., Ahiduzzaman, M., & Islam, M. N. (2022). Enhancement of the selected physico-chemical properties of steamed rice cake by the application of acetylated distarch adipate. *Journal of Food Measurement and Characterization*.
- Feng, M., Baoguo, X., Islam, M. N., Zhou, C., Wei, B., Wang, B., Ma, H., & Chang, L. (2022). Individual and synergistic effect of multi-frequency ultrasound and electro-infrared pretreatments on polyphenol accumulation and drying characteristics of edible roses. *Food Research International*, 112120.
- Haque, M. M., Haque, M. A., Mosharaf, M.K., Islam, M. S., Islam, M. M., Hasan, M., Molla, A.H., & Haque, M. A. (2022). Biofilm-mediated decolorization, degradation and detoxification of synthetic effluent by 2 novel biofilm-producing bacteria isolated from textile dyeing effluent. *Environmental Pollution*, 314, 120237.
- Haque, M.M., Biswas, M.S., Mosharaf, M.K., Haque, M.A., Islam, M. S., Nahar, K., Islam, M.M., Shozib, H.B., & Islam, M.M. (2022). Halotolerant biofilm-producing rhizobacteria mitigate seawater-induced salt stress and promote growth of tomato. *Scientific reports*, 12(1), 5599.
- Hasan, M. M., Ahiduzzaman, M., Islam, M. N., Haque, M. A., & Hossain, M. M. (2022). Formulation and Senso-chemical Evaluation of Palmyrah Palm (*Borassus flabellifer L.*) Based Value-added Products. *Journal of Food Research*, 11(3), 36-46.
- Hossain, M. S., Islam, M. N., Rahman, M. M., Mostofa, M. G., & Khan, M. A. R. (2022). Sorghum: A prospective crop for climatic vulnerability, food and nutritional security. *Journal of Agriculture and Food Research*, 8, 100300.
- Min, F., Chitrakar, B., Chen, J., Islam, M. N., Wei, B., Wang, B., Zhou, C., Ma, H., & Xu, B. (2022). Effect of Multi-Mode Thermo-sonication on the Microbial Inhibition and Quality Retention of Strawberry Clear Juice during Storage at Varied Temperatures. *Foods*, 11(17), 2593.
- Min, X., Liu, S., Yu, Y., Guo, L., Wang, Y., Feng, Y., Fei, P., Kang, H., & Ali, M. A. (2022). Antibacterial mode of *Eucommia ulmoides* male flower extract against *Staphylococcus aureus* and its application as a natural preservative in cooked beef. *Frontiers in Microbiology*, 13, 1-12. doi: <https://doi.org/10.3389/fmicb.2022.846622> (IF = 5.640)
- Reza, A., Ahamed, T., Miah, M. M. U., & Ahiduzzaman, M. (2022). Growth and Yield of Dragon Fruit





in Aonla based Multistoried Fruit Production Model. *European Journal of Agriculture and Food Sciences*, 4(5), 134–141.

Saha, K. K., Rahman, A., Rahman, M. M., Syduzzaman, M., Ali., M. A., Riza, D. F., Uddin, M. Z., Moniruzzaman, M., & Oliver, M. M. H. (2022). Classification of starfruit maturity using smartphone-image and multivariate analysis. *Journal of Agriculture and Food Research*, 11, 100473.

Sultana, R., Shemu, S., Ali, M. A., Ahiduzzaman, M., Rahman, M. M., Rafiquzzaman, S.M., & Haque, M. A. (2022). Burmese grape is an underexploited fruit crop potential to use in phytonutrient enriched yogurt formulation. *European Journal of Applied Sciences*, 10(1), 525-543.

#### b) Book/Book Chapter

Ahiduzzaman, M. (Ed.). (2022). *Postharvest Technology: Recent Advances, New Perspectives and Applications*. IntechOpen, DOI:10.5772/intechopen.95208.

Ghosh, U. K., Hossain, M. S., Islam, M. N., & Khan, M. A. R. (2022). Role of Tocopherol in Conferring Abiotic Stress Tolerance in Plants. *Antioxidant Defense in Plants: Molecular Basis of Regulation*, 215.

Islam, M. N. (2022). Chemometrics in Nondestructive Quality Evaluation. In *Nondestructive Quality Assessment Techniques for Fresh Fruits and Vegetables*, (pp. 331-356). Springer.

#### Postgraduate Student's Information

Program	Number
MS	02
PhD	-
Total =	02

#### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AGP 330	Fundamentals of Food and Agro-Processing	BS	2.0	Dr. Md. Ahiduzzaman Dr. Md. Aslam Ali

#### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AGP 510	Basic Thermodynamics, Heat and Mass Transfer	MS	3.0	Dr. Md. Ahiduzzaman
	AGP 502	Processing Technology of Fruits and Vegetables	MS	3.0	Dr. Md. Ahiduzzaman
Autumn	AGP 501	Processing of Field Crops	MS	3.0	Dr. Md. Ahiduzzaman
	AGP 503	Processing of Fish, Meat and Dairy Products	MS	3.0	Dr. Md. Aslam Ali
	AGP 517	Agro-Product Storage and Inspection	MS	3.0	Dr. Md. Nahidul Islam



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Winter	AGP 504	Product Packaging & Quality Control	MS	3.0	Dr. Md. Nahidul Islam
	AGP 506	Food Processing and Preservation Technology	MS	3.0	Dr. Md. Ahiduzzaman
	AGP 507	Food Quality Assurance and Safety	MS	3.0	Dr. Md. Nahidul Islam
	AGP 508	Food Chemistry and Nutrition	MS	3.0	Dr. Md. Aslam Ali

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## Department of Biochemistry and Molecular Biology

www.bsmrau.edu.bd/bmb

### Faculty Members

#### Professor

Dr. Muhammad Badruzzaman

#### Associate Professor

Hafij-Al-Kader

Dr. Md. Nurealam Siddiqui

#### Assistant Professor

Dr. Afzal Sheikh

### Officers and Staff

Name	Designation
Salma Akter	Lab Assistant

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Afzal Sheikh Co-PI: Dr. Md. Zahangir Alam Soud Department of Biochemistry and Molecular Biology, University of Rajshahi	A study to investigate the impacts of food additives on inflammatory immune disease and reproductive system	RMW (2021-24) BDT 11,00,000	2021
PI: Dr. Muhammad Badruzzaman Co-PI: Dr. Md. Nahidul Islam	Melatonin rescues neurobehavioral and reproductive abnormalities caused by the fungicide propiconazole in catfish <i>Mystus cavasius</i>	BANBEIS 6.20 lak with honorarium	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. Muhammad Badruzzaman Co-PI: Md. Moniruzzaman	Effect of fungicide on the reproductive activity through the alterations of dopaminergic activity in the brain of catfish <i>Mystus cavasius</i>	MoST 02 lak	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Nurealam Siddiqui	German Plant Breeding Conference in Heinrich Heine University Düsseldorf	12-14 September 2022	Germany	Oral presenter



Dr. Md. Nurealam Siddiqui	5 <sup>th</sup> Young Scientist Congress by Bangladesh Academy of Sciences	25-27 November 2022	Bangladesh	Poster presenter
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### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Afzal Sheikh	Assistant Provost	April 2021 to present

### List of Publication by the Members of the Department

#### a) Journal

- Al Kader, H., Gill, H., & Truong, T. (2022). Demineralisation and recovery of whey proteins from commercial full-fat salty Cheddar whey using size-exclusion chromatography. *Food Chemistry*, 405, 134831.
- Ali, M., Kamal, M., Rahman, M., Siddiqui, M., Haque, M., & Saha, K. K. (2022). Functional dairy products as a source of bioactive peptides and probiotics: Current trends and future perspectives. *Journal of Food Science and Technology*, 59(4), 1263-1279.
- Immamura S., Hur S. P., Takeuchi Y., Badruzzaman M., Mahardini A., Rizky D., & Takemura A. (2022). Effect of short-and long-term melatonin treatments on the reproductive activity of the tropical damselfish *Chrysiptera cyanea*. *Fish Physiology and Biochemistry*. 48(1), 253-262.
- Kamruzzaman, M., Beyene, M. A., Siddiqui, M. N., Ballvora, A., Léon, J., & Naz, A. A. (2022). Pinpointing genomic loci for drought-induced proline and hydrogen peroxide accumulation in bread wheat under field conditions. *BMC Plant Biology*, 22(1), 1-18.
- Mohamed, M., Siddiqui, M. N., Oyiga, B. C., Léon, J., & Ballvora, A. (2022). Validation of a QTL on Chromosome 1DS Showing a Major Effect on Salt Tolerance in Winter Wheat. *International Journal of Molecular Sciences*, 23(22), 13745.
- Sheikh A., Huang H., Parvin S., Badruzzaman M., Ahmed T., Hossain E., Baran I. S., & Saud Z. A. (2022). A multi-population-based genomic analysis uncovers unique haplotype variants and crucial mutant genes in SARS-CoV-2. *Genetic Engineering and Biotechnology*, 20;149.
- Siddiqui, M., Schneider, M., Barbosa, M. B., Léon, J., & Ballvora, A. (2022). Natural selection under conventional and organic cropping systems affect root architecture in spring barley. *Scientific Reports*, 12(1), 1-15.

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	BMB 230	Metabolism of Biomolecules	2.0	3+1	Dr. Muhammad Badruzzaman Dr. Afzal Sheikh
	BMB 201	Chemistry of Biomolecules	2.0	2+1	Dr. Muhammad Badruzzaman Dr. Afzal Sheikh
Autumn	BMB 131	Biophysics & Chemistry of Biomolecules	1.0	3+1	Dr. Afzal Sheikh
	BMB 135	Chemistry of Biomolecules	1.0	2+1	Dr. Muhammad Badruzzaman Dr. Afzal Sheikh



Winter	BMB 261	Metabolism of Biomolecules in Aquatic Animals	2.0	3+0	Dr. Afzal Sheikh Dr. Nurealam Siddiqui
	BMB 161	Metabolism of Biomolecules	1.0	3+0	Dr. Afzal Sheikh Dr. Nurealam Siddiqui

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	CBT 541	Plant Biochemistry	MS	3.0	Dr. Muhammad Badruzzaman



# Department of Computer Science & Information Technology

www.bsmrau.edu.bd/cst

## Faculty Members

### Professor

Md. Roshidul Hasan

### Associate Professor

Dr. Gonesh Chandra Saha

### Assistant Professor

Suraiya Yasmin

Md. Masum Billah

Tanjea Ane

## Officers and Staff

Name	Designation
Md. Mehedy Hossain	IT Technician
Md. Shihab Mollah	Lab Attendant
Md. Anwar Hossain	MLSS

## List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Gonesh Chandra Saha Co-PI: Md. Masum Billah	IoT Based Smart Agricultural Crop Monitoring in Terms of Temperature and Moisture	MoST, GoB BDT 250000/-	2022
PI: Dr. Gonesh Chandra Saha Co-PI: Md. Masum Billah	IoT based Smart Agriculture: Precision Agriculture Monitoring System	RMW, BSMRAU BDT 510000/-	2022

## List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Md. Masum Billah	Training on Statistical Data Analysis	27-11-2022 to 28-11-2022	Bangladesh	Participant

## Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Gonesh Chandra Saha	Head, Department of Computer Science & Information Technology	01.01.2022 to 16.08.2022
Md. Roshidul Hasan	Head, Department of Computer Science & Information Technology	18.08.2022 to 30.11.2022
Dr. Gonesh Chandra Saha	Head, Department of Computer Science & Information Technology	01.12.2022 to 31.12.2022



### List of Publication by the Members of the Department

#### a) Journal

- Hasi Saha, Haider Iqbal Khan, Md. Masum Billah and G C Saha. (2022). Agricultural Crop Monitoring Using Online 3D Visualization Technique. *Int. J. of Scientific and Research Publications*. 12(12): 455-459.
- Pritom Kumer Rajvor, Syed Jamaluddin Ahmad, Suraiya Yasmin and Ali Hasan Dewan Rafi (2022). A review on: Different type of noise model in digital image processing, *International Journal of Engineering and Applied Sciences (IJEAS)*, 9(2):14-19.
- Rajvor, P. K., Ahmad, S. J., Yasmin, S., & Rafi, A. H. D. (2022). A review on: Different type of noise model in digital image processing, *International Journal of Engineering and Applied Sciences (IJEAS)*, 9(2), 14-19.
- Saha, H., Khan, H. I., Billah, M. M., & Saha, G. C. (2022). Agricultural Crop Monitoring Using Online 3D Visualization Technique. *International Journal of Scientific and Research Publications*. 12(12), 455-459.

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	CST-405	Information and Communication Technology	IV	3+1.5	Dr. Gonesh Chandra Saha Md. Masum Billah
	CST-310	Information and Communication Technology	III	3+1	Dr. Gonesh Chandra Saha Md. Masum Billah
	CST-101	ICT in Agricultural Economics	I	3+1	Suraiya Yasmin Tanjea Ane

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	CST 515	Data Analysis by Microcomputer	MS/PhD	3.0	Dr. Gonesh Chandra Saha



## Department of Crop Botany

www.bsmrau.edu.bd/cbt, headcbt@bsmrau.edu.bd

### Faculty Members

#### Professor

Dr. Md. Abdul Baset Mia

Dr. Totan Kumar Ghosh

#### Associate Professor

Mohammed Mohi-Ud-Din

Haider Iqbal Khan

#### Assistant Professor

S. M. Zubair Al-Meraj

#### Lecturer

Anika Nazran

### Officers and Staff

Name	Designation
Md. Muktadirul Hasan	Administrative Officer
Md. Billal Hossain	Assistant Technical Officer
Md. Osman Ali	Senior MLSS

### List of Research Project (Ongoing): Internal / External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Md. Abdul Baset Mia	Development of high yielding salt tolerant aromatic fine rice variety.	RMW, BSMRAU BDT 960000/-	2021-2024
Dr. Mohammed Mohi-Ud-Din	Enhancement of combined drought and heat stress tolerance of some underutilized cereals using PGPR	RMW, BSMRAU BDT 730000/-	2022-2025
Dr. Totan Kumar Ghosh	Drought tolerance mechanisms in french bean ( <i>Phaseolus vulgaris</i> L.) in response to combined exogenous application of melatonin and methyl jasmonate.	RMW, BSMRAU BDT 850000/-	2021-2024
Haider Iqbal Khan	Characterization and evaluation of <i>Piper chaba</i> landraces of bangladesh.	RMW, BSMRAU BDT 730000/-	2022-2025
S. M. Zubair Al-Meraj	Investigating the role of 6- Benzyladenine and melatonin in improving waterlogging tolerance of eggplant	Innovation project fund RMW, BSMRAU BDT 100000 /-	July, 2022
Anika Nazran	Comparative investigation of exogenously applied ethanolic and aqueous methyl jasmonate for drought tolerance enhancement in wheat	Innovation project fund (RMW), BSMRAU BDT 100000 /-	July, 2022





### List of Seminar/Workshop/Training Attended (Local and foreign)

Name of the Teacher	Program attended	Date	Country	Role / contribution in the program
Dr. Mohammed Mohi-Ud-Din	সেবা প্রদান বিষয়ে আওতাধীন দপ্তরসমূহের ত্রৈমাসিক সমন্বয় সভা-০২	21 Nov, 2022	IQAC, BSMRAU, Bangladesh	Participant
Dr. Mohammed Mohi-Ud-Din	Teaching Load Calculation	13 Nov, 2022	IQAC, BSMRAU, Bangladesh	Participant
Dr. Mohammed Mohi-Ud-Din	Activities and achievements of Outreach: a tale of a year	16 June, 2022	Outreach, BSMRAU, Bangladesh	Participant
S. M. Zubair Al-Meraj	Training on Statistical Data Analysis	27-28 Nov, 2022	Training program by IQAC	Participant
S. M. Zubair Al-Meraj	শুধাচার সংক্রান্ত প্রশিক্ষণ	26 Sep, 2022	Training program by IQAC	Participant
Anika Nazran	Scientific Writing Course	13-17 Feb, 2022	Training program by IQAC	Participant
Anika Nazran	Training on Statistical Data Analysis	27-28 Nov, 2022	Training program by IQAC	Participant
Anika Nazran	শুধাচার সংক্রান্ত প্রশিক্ষণ	26 Sep, 2022	Training program by IQAC	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Mohammed Mohi-Ud-Din	Head Department of Crop Botany	01 March 2022 - ongoing
Dr. Totan Kumar Ghosh	Director Dr. M. A. Wazed Mia Central Laboratory	September, 2022- ongoing
Haider Iqbal Khan	Associate Director (Extension), Kbd. Dr. Kazi M. Badruddoza Outreach Center	13 September, 2022-ongoing

### List of Publication by the Members of the Department

#### a) Journal

- Das, A. K., Anik, T. R., Rahman, M. M., Keya, S. S., Islam, M. R., Rahman, M. A., Sultana S., Ghosh, P. K., Khan, S., Ahamed, T., Ghosh, T. K., Tram, L. S., & Mostofa, M.G. (2022). Ethanol Treatment Enhances Physiological and Biochemical Responses to Mitigate Saline Toxicity in Soybean *Plants*, *11*(3), 272. <https://doi.org/10.3390/plants11030272> (Impact Factor: 4.658).
- Islam, M. R., Islam, M. S., Akter, N., Mohi-Ud-Din, M., & Mostofa, M. G. (2022). Foliar Application of Cytokinin Modulates Gas Exchange Features, Water Relation and Biochemical Responses to Improve Growth Performance of Maize under Drought Stress. *Phyton-International Journal of Experimental Botany*, *91*(3), 633–649. <https://doi.org/10.32604/phyton.2022.018074> (Impact Factor: 1.407).
- Islam, M. R., Rahman, M. M., Mohi-Ud-Din, M., Akter, M., Zaman, E., Keya, S. S., ... & Hasanuzzaman, M. (2022). Cytokinin and gibberellic acid-mediated waterlogging tolerance of mungbean (*Vigna radiata* L. Wilczek). *PeerJ*, *10*, e12862. <https://doi.org/10.7717/peerj.12862> (Impact Factor: 3.061).



- Jahan, A., Yamazaki, Y., Islam, M., Ghosh, T. K., Yoshimura, N., Kato, H., ... & Takezawa, D. (2022). Differential regulations of abscisic acid-induced desiccation tolerance and vegetative dormancy by group B3 Raf kinases in liverworts. *Frontiers in Plant Science*, *13*, 952820. <https://doi.org/10.3389/fpls.2022.952820> (Impact Factor: 6.627).
- Khan, H. I., Ghosh T. K., Mia M. A. B. (2022). Altered anatomical appraisal of mung bean (*Vigna radiata* (L.) Wilczek) under salinity stress. *Bangladesh J. Sci. Ind. Res.*, *57*(3), 139-148. <https://doi.org/10.3329/bjsir.v57i3.62016>
- Mohi-Ud-Din, M., Hossain, M. A., Rohman, M. M., Uddin, M. N., Haque, M. S., Ahmed, J.U., ... & Pessaraki, M. (2022). Canopy spectral reflectance indices correlate with yield traits variability in bread wheat genotypes under drought stress. *PeerJ*, *10*, e14421. <https://doi.org/10.7717/peerj.14421> (Impact Factor: 3.061).
- Mohi-Ud-Din, M., Hossain, M. A., Rohman, M. M., Uddin, M. N., Haque, M. S., Dessoky, E. S., ... & Aloufi, S. (2022). Assessment of Genetic Diversity of Bread Wheat Genotypes for Drought Tolerance Using Canopy Reflectance-Based Phenotyping and SSR Marker-Based Genotyping. *Sustainability*, *14*, 9818. <https://doi.org/10.3390/su14169818> (Impact Factor: 3.889).
- Mohi-Ud-Din, M., Rohman, M. M., Alam, M. A., Hasanuzzaman, M., & Islam, T. (2022). Wheat variety carrying  $2N^vS$  chromosomal segment provides yield advantage through lowering terminal heat-induced oxidative stress. *Protoplasma*, 2022. <https://doi.org/10.1007/s00709-022-01759-w> (Impact Factor: 3.186).
- Mostofa, M. G., Rahman, M. M., Ghosh, T. K., Kabir, A. H., Abdelrahman, M., Khan, M.A.R., ... & Tran, L. S. P. (2022). Potassium in plant physiological adaptation to abiotic stresses. *Plant Physiology and Biochemistry*, *186* (1), 279-289. <https://doi.org/10.1016/j.plaphy.2022.07.011> (Impact Factor: 5.437).
- Urmi, T.A., Rahman, M.M. Islam, M.M., Islam, M.A., Jahan, N.A., Mia, M.A.B., ... & Kalaji, H.M. (2022). Integrated nutrient management for rice yield, soil fertility, and carbon sequestration. *Plants*, *11*, 138. <https://doi.org/10.3390/plants/11010138> (Impact Factor: 4.658).

#### **b) Book/Book Chapter**

- Abdullahi, S., Mia, M. A. B., & Ghazali, A. H. (2022). Growth Enhancement and Bioremediation of Heavy Metal in Crop Plants through *Bacillus* Species Application. In *Bacilli in Agrobiotechnology* (pp. 319-334). Springer, Cham. [https://doi.org/10.1007/978-3-030-85465-2\\_14](https://doi.org/10.1007/978-3-030-85465-2_14)
- Hossain, G. M., Ghazali, A. H., Islam, T., & Mia, M. A. B. (2022). Enhanced Nutrient Accumulation in Non-leguminous Crop Plants by the Application of Endophytic Bacteria *Bacillus* Species. In *Bacilli in Agrobiotechnology* (pp. 349-364). Springer, Cham. [https://doi.org/10.1007/978-3-030-85465-2\\_16](https://doi.org/10.1007/978-3-030-85465-2_16)
- Mia, M. A. (2022). Enhanced Root Morphogenesis in Non-legumes as Induced by Rhizobacteria *Bacillus* spp. In *Bacilli in Agrobiotechnology* (pp. 151-168). Springer, Cham. [https://doi.org/10.1007/978-3-030-85465-2\\_7](https://doi.org/10.1007/978-3-030-85465-2_7)
- Mia, M. A. B. (2022). Alleviation of Salinity Stress in Non-legumes by Beneficial Salt-tolerant Bacteria. CABI Books. CABI International. doi: <https://doi.org/10.1079/9781789248098.0031>
- Tharek M., Abdullahi, S., Mia M. A. B, Najimudin, N., & Ghazali, A. H. (2022). Endophytes as Potential Biostimulants to Enhance Plant Growth for Promoting Sustainable Agriculture. CABI Books. CABI International. doi: <https://doi.org/10.1079/9781789248098.0026>
- Zuan, A. T. K., Ghazali, A. H. A., & Mia, M. A. B. (2022). Progress of  $N_2$  Fixation by Rice–*Rhizobium* Association. In: D.K. Maheshwari, R. Dobhal, S. Dheeman, (Eds) *Nitrogen Fixing Bacteria: Sustainable Growth of Non-legumes*. *Microorganisms for Sustainability*, vol 36. Springer, Singapore. [https://doi.org/10.1007/978-981-19-4906-7\\_15](https://doi.org/10.1007/978-981-19-4906-7_15)



### Postgraduate Student's Information

Program	Number
MS	3
PhD	1
Total =	4

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	CBT 110	Plant Taxonomy & Economic Botany	I	3.0	Haider Iqbal Khan S. M. Zubair Al-Meraj
	CBT 230	Plant Anatomy & Embryology	II	3.0	Dr. Md. Abdul Baset Mia Anika Nazran
Autumn	CBT 250	Plant Physiology (New)	II	4.0	Dr. Totan Kumar Ghosh Mohammed Mohi-Ud-Din Anika Nazran
	CBT 350	Plant Physiology (Old)	III	4.5	Dr. Totan Kumar Ghosh Mohammed Mohi-Ud-Din S. M. Zubair Al-Meraj
Winter	CBT 465	Plant Ecology (Old)	IV	4.5	Dr. Md. Abdul Baset Mia Haider Iqbal Khan

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	CBT 531	Plant Nutrition 1	MS & PhD	3.0	Dr. Md. Abdul Baset Mia
	CBT 507	Plant Ecology 1	MS & PhD	3.0	Mohammed Mohi-Ud-Din
	CBT 636	Plant Ecology II	MS & PhD	3.0	Dr. Md. Abdul Baset Mia
	CBT 605	Plant Physiology II	MS & PhD	3.0	Dr. Jalal Uddin Ahmed (Adjunct Faculty)
Autumn	CBT 630	Cell Physiology	MS & PhD	3.0	Dr. Totan Kumar Ghosh
	CBT 610	Stress Physiology	MS & PhD	3.0	Dr. Jalal Uddin Ahmed (Adjunct Faculty)
	CBT 516	Plant Embryology	MS & PhD	3.0	Dr. Md. Abdul Baset Mia
	CBT 522	Economic Botany	MS & PhD	3.0	Haider Iqbal Khan
Winter	CBT 503	Plant Physiology I	MS & PhD	3.0	Dr. Totan Kumar Ghosh
	CBT 505	Plant Anatomy	MS & PhD	3.0	Dr. Md. Abdul Baset Mia



## Department of Environmental Science

www.bsmrau.edu.bd/ens

### Faculty Members

#### Professor

Dr. Md. Abul Hossain Molla

Dr. Md. Manjurul Haque

#### Associate Professor

Dr. Mohammad Zahangeer Alam

Dr. Md. Raihan Talukder

#### Assistant Professor

Md. Khaled Mosharaf (Study leave)

### Officers and Staff

Name	Designation
Md. Nurul Hoque	Technical Officer
Md. Abdus Salam	Office Assistant cum computer operator
Md. Shahidul Islam	MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Md. Nayeem Hossen (2016-05-3849)	Evaluation of biofilm producing rhizobacteria for bioremediation of Methyl orange from synthetic wastewater	Dr. Md. Manjurul Haque	Sum/22
Md. Mohiminul Haque Mithun (2015-05-3509)	Identification of biofilm forming bacteria and matrix components of biofilms for bioremediation of dyeing wastewater	Dr. Md. Manjurul Haque	Sum/22
Mehedi Hasan (2015-05-3560)	Identification of biofilm producing bacteria and contents of the biofilms for bioremediation of tannery wastewater	Dr. Md. Manjurul Haque	Win/21

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Mohammad Zahangeer Alam Co-PI: Dr. Amin Uddin Mridha	Role of Arbuscular Mycorrhizal Fungi (AMF) on stress enzymes and bioactive compounds in tomatoes ( <i>Lycopersicum esculentum</i> )	RMW, BSMRAU BDT 900000/-	2020
PI: Dr. Mohammad Zahangeer Alam	Effect of practical soil amendments on biomass growth and arsenic uptake in mung bean	UGC BDT 300000/-	2022



PI: Dr. Mohammad Zahangeer Alam Co-PI: Mr. Mohammed Rokonzaman	Conservation strategies on declined biodiversity at Gomti riverine wetland	MoST, GoB BDT 200000/-	2022
PI: Dr. Mohammad Zahangeer Alam Co-PI: Dr. Md. Abdul Baset Mia	Isolation, characterization, and culture of arbuscular mycorrhizal fungi (AMF) with crops towards the development of mycorrhiza enriched bio-fertilizer	BANBEIS BDT 2000000/-	2021
PI: Dr. Md. Raihan Talukder Co-PI: Mr. Md Khaled Mosharaf	Growth enhancement and upgrading of bioactive components accumulation in some vegetable's crops through hydroponic technique.	RMW BDT 3,00,000/-	2020-2021
PI: Dr. Md. Raihan Talukder Co-PI: Mr. Khokan Kumar Saha	Standardizing the compositions and concentrations of the culture solution for the production of quality strawberry in closed hydroponic system	MoE (BANBEIS) BDT 5,96,000/-	2020-2021
PI: Dr. Md. Raihan Talukder Co-PI: Mr. Md Khaled Mosharaf	Determination of antioxidant and nutritional variations in lettuce due to soil and soil-less cultivation	MoST BDT 2,50,000/-	2020-2021

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. Mohammad Zahangeer Alam	Effect of land use land cover changes on biodiversity at wetland ecosystem	MoST Tk. 250000/-	2022
PI: Dr. Md. Manjurul Haque Co-PI: Dr. Ahiduzzaman	Bioremediation of industrial wastewater by bacterial biofilm consortia	BAS-USDA BDT 4339070/-	September 2020

### List of Released Varieties/Technologies

Name of the variety/ Technology	Year of Release	Salient Features	Photo
Bio-bleaching of colored wastewater by drought-tolerant plant growth-promoting rhizobacteria	2022	Outstanding color removal rate (99.1 – 99.8%). Days to decolorization: within 96 h Can be applied under both microaerophilic and aerobic conditions. Simple, ecofriendly and renewable technique	

Figure. Decolorized samples by *Pseudomonas fluorescens* ESR7, *P. veronii* ESR13, *Stenotrophomonas maltophilia* ESR20, *Staphylococcus saprophyticus* ESD8 and *P. parafulva* ESB18 at 28 °C within 96 h incubation in microaerophilic conditions.

**List of Seminar/ Workshop/Training Attended (Local and foreign)**

Name	Program attended	Date	Country	Role/contribution in the program
Dr. Md. Abul Hossain Molla	Seminar	07-10-22	Japan	Presented
		14-10-22	Japan	Attended only
		28-10-22	Japan	Presented
Dr. Mohammad Zahangeer Alam	“Conservation strategies on the declined biodiversity at the Gomti riverine wetland in comilla” International Conference on Environmental Protection for Sustainable Development (ICEPSD-2022), CIRDAP and University of Dhaka, Bangladesh, Organised by Forest and Environment Affairs Sub-Committee, Bangladesh Awami League.	2-4 Sept. 2022	Bangladesh	Keynote speaker
Dr. Mohammad Zahangeer Alam	Technical session: Climate change, mitigation and adaptation, International Conference on Environmental Protection for Sustainable Development (ICEPSD-2022), CIRDAP and University of Dhaka, Bangladesh, Organised by Forest and Environment Affairs Sub-Committee, Bangladesh Awami League.	3rd Sept. 2022	Bangladesh	Session chair
Dr. Mohammad Zahangeer Alam	“Hands on-training on greenhouse gas emission and mitigation assessment for agriculture sector”	27-29 September 2022	FAO and DoE. Bangladesh	Participants

**Administrative Duties by the Departmental Members (if any with tenure)**

Name	Position & Address	Duration
Dr. Mohammad Zahangeer Alam	Head, Department of Environmental Science	12th September 2021 to ongoing

**List of Publication by the Members of the Department****(a) Journal**

Alam, M. Z., Hoque, M. A., & Carpenter-Boggs, L. (2022). Mycorrhizal fungi, biochar, and selenium increase biomass of *Vigna radiata* and reduce arsenic uptake. *Toxicological & Environmental Chemistry*, doi: [10.1080/02772248.2022.2028790](https://doi.org/10.1080/02772248.2022.2028790) (Impact factor 1.56).

Haque, M. M., Biswas, M. S., Mosharaf, M. K., Haque, M. A., Islam, M. S., Nahar, K., Islam, M. M., Shozib, H. B., Islam, M. M., & Elahi, F. E. (2022). Halotolerant biofilm producing rhizobacteria mitigate seawater induced salt stress and promote growth of tomato. *Sci. Rep.*, 12, 5599.

Haque, M. M., Haque, M. A., Mosharaf, M. K., Islam, M. S., Islam, M. M., Hasan, M., Molla, A. H., &



- Haque, M. A. (2022). Biofilm-mediated decolorization, degradation and detoxification of synthetic effluent by novel biofilm-producing bacteria isolated from textile dyeing effluent. *Environ. Pollut.*, 314, 120237.
- Hasnat, M., Alam, M. A., Khanam, M., Binte, B. S., Kabir, M. H., Alam, M. S., Kamal, M. Z. U., Rahman, G. K. M. M., Haque, M. M., & Rahman, M. M. (2022). Effect of nitrogen fertilizer and biochar on organic matter mineralization and carbon accretion in soil. *Sustainability*, 14, 3684.
- Talukder, S., Mamun, M. A. A., Hossain, M. S., Khan, M. A. R., Rahman, M.M., Talukder, M. R., Haque, M.M., & Biswas, J. C. (2022). *Agron. Res.*, 20, 1163–1174.
- Zahan, H., Molla, A. H., & Haque, M. M. (2022). Exploration of potential indigenous fungal species for mycoremediation of industrial effluent. *J. Water chem. Technol.*, 44, 123-131.

#### b) Book/Book Chapter

- Alam, M. Z. (2022). Math o path. “Contribution of Prime Minister for the Conservation of Mangrove Forest”. World Environment Day 2022.
- Alam, M. Z. (2022). A Tale of Environment. “Contribution of Prime Minister for the Conservation of Mangrove Forest”. Published by Forest and Environment Affairs Sub-Committee, Bangladesh Awami League. September 2022.

#### Postgraduate Student’s Information

Program	Number
MS	08
PhD	-
Total =	08

#### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	ENS 525	Waste Management	MS	3.0	Dr. Abul Hossain Molla
	ENS 501	Principles of Environmental Science	MS	3.0	Dr. Md. Manjurul Haque Md. Khaled Mosharaf
Autumn	ENS 535	Environmental Microbiology	MS	3.0	Dr. Md. Manjurul Haque



## Department of Entomology

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### Faculty Members

#### Professor

Dr. Md. Ramiz Uddin Miah  
Dr. Md Ruhul Amin  
Dr. Md. Ahsanul Haque Swapon  
Dr. Habibur Rahman  
Dr. Md. Mamunur Rahman

#### Associate Professor

Dr. Mst. Fatema Khatun  
Dr. Md. Shamim Hossain

#### Lecturer

Mansura Afroz  
Md. Khairul Mazed

### Officers and Staff

Name	Designation
Sharmin Islam	Administrative Officer
Tahera Khanom	Lab Assistant
Mohammad Shamim Reza	Class Room Attendant
Md. Abdul Kader	Senior MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Md. Jamiur Rahman (2015-05-3477)	Biorational management of sucking insect pests and their impact on viral diseases of potato	Dr. Md. Ramiz Uddin Miah	Sum/22
Ambika Rani Mondal (2016-05-3818)	Evaluation of toxicity of selected insecticides against the sucking insects of tomato	Dr. Md Ruhul Amin	Sum/22
Farjana Akter Ratna (2015-05-3517)	Assessment of insect pests and their natural enemy of some country bean ( <i>Lablab purpureus</i> L.) varieties	Dr. Md. Ahsanul Haque Swapon	Sum/22
Jakia Sultana (2016-05-3898)	Taxonomic and functional diversity of ants (Hymenoptera: Formicidae) in two ecosystems of Bangladesh	Dr. Md. Mamunur Rahman	Sum/22
Saifatul Hossain Rano (2016-05-3879)	Molecular identification of <i>Apis mellifera</i> L. and <i>Apis cerana</i> F. and their foraging behaviour in litchi orchard	Dr. Md. Mamunur Rahman	Sum/22





Antara Samiha (2016-05-3823)	Insect pest status and use pattern of insecticide in T. Aman rice	Dr. Md. Shamim Hossain	Sum/22
Saoudia Jahan (2016-05-3874)	Management of major insect pest of cucumber using biorational insecticides and their impact on natural enemies	Dr. Md. Ramiz Uddin Miah	Aut/22
Abida Mariom (2016-05-3871)	Management of major insect pests of yard long bean using biorational insecticides and their impact on natural enemies	Dr. Md. Ramiz Uddin Miah	Aut/22
Sayda Arifa Akter (2016-05-3881)	Impact of biorational insecticides on natural enemies and population dynamics of sucking insect pests and cucurbit fruitfly of cucumber	Dr. Md. Ahsanul Haque Swapon	Aut/22
Md. Imran Hossain (2016-05-3830)	Taxonomic study on species complex of jassid in Bangladesh	Dr. Md. Shamim Hossain	Aut/22
Pranto Das (2020-05-5701)	Morpho-biochemical studies on brinjal mutant lines against shoot and fruit borer ( <i>Leucinodes orbonalis</i> Guenee)	Dr. Md. Ahsanul Haque Swapon	Win/22
Amol Mrong (2016-05-3911)	Evaluation of some bio-rational management approaches against pod borer complex of yard long bean	Dr. Md. Shamim Hossain	Win/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Habibur Rahman Co-PI: Dr. Md. Ramiz Uddin Miah	Development of Protocols for Rapid Removal of Pesticide Residues in Vegetables and Fruits for Safe Food Consumption	RMW, BSMRAU BDT 960000.00	2020-21
PI: Dr. Md. Mamunur Rahman Co-PI.: Dr. Md. Moshikul Islam	Authentication of the Entomological and Botanical origin of Bangladeshi honey using molecular and biochemical approaches	RMW, BSMRAU BDT 960000.00	2020-21
PI: Dr. Md. Shamim Hossain Co-PI: Dr. Md. Ruhul Amin	Taxonomy of the Microleafhopper Subfamily Typhlocybininae (Homoptera: Cicadellidae) from Bangladesh	RMW, BSMRAU BDT 660000.00	2020-21
PI: Dr. Md. Ramiz Uddin Miah Co-PI: Dr. Md. Shamim Hossain	Population abundance and management of leaf eating insect pests using biorational insecticides, their impact on natural enemies: A comparative study on cucumber, bottlegourd and pumpkin	RMW, BSMRAU BDT 120000.00	2021-22
PI: Dr. Md. Ruhul Amin Co-PI: Dr. Md. Ramiz Uddin Miah	Physiomorphic characterization of introduced sweet corn genotype and screening against pests	RMW, BSMRAU BDT 660000.00	2021-22
PI: Dr. Md. Ruhul Amin Co-PI: Mansura Afroz	Physiomorphic characterization and assessment of pest potential of introduced sweet gourd genotype for development of variety	MoST, GoB BDT 450000.00	2021-22



PI: Dr. Md. Shamim Hossain Co-PI: Md. Khairul Mazed	Developing sustainable management practices against brown plant hopper (BPH) of rice in Barind areas of Bangladesh	MoST, GoB BDT 250000.00	2021-22
PI: Dr. Habibur Rahman Co-PI: Dr. Md. Saiful Alam	Bio-Intensive Integrated Pest Management of Brinjal Shoot and Fruit Borer	MoST, GoB BDT 250000.00	2022-23
Dr. Habibur Rahman	Persistence and Risk Assessment of Emamectin Benzoate Residues in Brinjal Vegetables	UGC BDT 300000.00	2022-23
PI: Dr. Md. Mamunur Rahman Co-PI: Dr. Md. Abiar Rahman	Assessment of Ant Community Responses as Bioindicator in Two Forest Ecosystems in Bangladesh	UGC BDT 300000.00	2022-23
PI: Dr. Md. Mamunur Rahman Co-PI: Dr. Md. Ramiz Uddin Miah	Development of Ant based Mutualistic and Antagonistic Biocontrol Model Against Bean Aphid	MoST, GoB BDT 450000.00	2022-23
PI: Mansura Afroz	Development of silicon mediated induced resistance in chili against chili mite	RMW (Innovation fund) BDT 100,000.00	2022-23
PI: Md. Khairul Mazed	Selection of trap crop and resistant line/genotype of ash gourd against cucurbit fruit fly.	RMW (Innovation fund) BDT 100000.00	2022-23

#### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. Habibur Rahman Co-PI: Dr. Md. Saiful Alam	Screening of pest resistance in pumpkin germplasm and evaluation of novel insecticides against fruit fly ( <i>Bactrocera cucurbitae</i> )	MoST, GoB BDT 250,000.00	2022-23
PI: Md. Khairul Mazed	Improved bio-rational management practices against fall armyworm of maize	MoST, GoB BDT 90,000.00	2022-23

#### List of Seminar/Workshop/Training Attended (Local and foreign)

Name of the Teacher	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Ahsanul Haque Swapon	USAID F2F Food Safety and Quality Program on Honey Crystallization and its Quality Presented by Dr. Robert Owen [US Volunteer] University of Melbourne, Australia	25 January 2022	Webinar, Bangladesh	Participated as an expert panel



Mansura Afroz Khairul Mazed	Training on “Scientific Writing Course”	13-17 February 2022	BSMRAU, Bangladesh	Trainee
Dr. Md. Ramiz Uddin Miah Dr. Md. Ruhul Amin Dr. Md. Ahsanul Haque Swapon Dr. Md. Mamunur Rahman Dr. Md. Shamim Hossain Mansura Afroz Md. Khairul Mazed	বিসিএস (কৃষি) ক্যাডার কর্মকর্তাদের তিন মাস ব্যাপী “Apiculture for Livelihood and Biodiversity” বিষয়ক প্রশিক্ষণ	06-29 March 2022	BSMRAU, Bangladesh	Resource speaker
Dr. Md. Ruhul Amin Dr. Md. Mamunur Rahman Dr. Md. Shamim Hossain Mansura Afroz Md. Khairul Mazed	22 <sup>nd</sup> International Biennial Conference and Annual General Meeting 2021. Zoological Society of Bangladesh.	18 March 2022	University of Dhaka, Bangladesh	Research paper presentation
Dr. Md. Mamunur Rahman	Ensuring Intellectual Property Rights for University Faculty	21 March 2022	UGC, Bangladesh	Participant
Dr. Md. Ahsanul Haque Swapon	Amendments of the Honey standard produced in Bangladesh	20 April 2022	BSTI Bangladesh	As an expert personnel on bee and honey
Dr. Mst. Fatema Khatun	International Conference of KSAE Acclimatization to environmental change	28-29 April, 2022	SONO Belle Byeonsan, Korea	Poster presentation
Dr. Md. Ramiz Uddin Miah Dr. Md. Ruhul Amin Dr. Md. Ahsanul Haque Swapon Dr. Md. Mamunur Rahman Dr. Md. Shamim Hossain Mansura Afroz Md. Khairul Mazed	13 <sup>th</sup> Biennial conference of Bangladesh Entomological Society	13 May 2022	Bangladesh Entomological Society, Bangladesh	Attendee
Dr. Md. Ramiz Uddin Miah Dr. Md. Ruhul Amin	Inter Review Workshop of BARI	18 May 2022	Bangladesh	Participate as an expert panel
Dr. Md. Ahsanul Haque Swapon	Finalized the Honey Standard Produced by Natural and Migratory Beekeeping	24 May 2022	BSTI, Bangladesh	As an Expert Personnel on Bee and Honey
Dr. Mst. Fatema Khatun	National Institute of Agricultural Sciences, Korea on Plant Virus Disease Past, Present and Future workshop in Korea	30-31 May, 2022	Jeju, South Korea	Research paper presentation



Dr. Md. Ruhul Amin Dr. Md. Ahsanul Haque Swapon Dr. Md. Mamunur Rahman Dr. Md. Shamim Hossain Mansura Afroz Md. Khairul Mazed	Beekeeping to Enhance Ecosystem Restoration and Livelihoods	21 August 2022	Ecological Society of Bangladesh	Attendee
Dr. Md. Ramiz Uddin Miah Dr. Md. Ruhul Amin	Workshop on Obsolete Pesticide Contaminated Site Risk Assessment Under the Project “Pesticide Risk Reduction in Bangladesh”	18-22 September 2022	Bangladesh	Participate as an expert panel
Dr. Md. Ahsanul Haque Swapon	“Modern Beekeeping for Increasing Crop Yield & Poverty Alleviation” Batch 1	19 September 2022	Bangladesh	Resource speaker
Dr. Md. Ahsanul Haque Swapon	“Modern Beekeeping for Increasing Crop Yield & Poverty Alleviation” Batch 2	22 September 2022	Bangladesh	Resource Speaker
Dr. Habibur Rahman	Ecofriendly Agriculture in Bangladesh: Concepts, Challenges and Opportunities	22 September 2022	NATA, Bangladesh	Resource speaker
Dr. Habibur Rahman	Introduction to Biological Control, Categories of Natural Enemies and Their Use in Pest Management Programme			
Dr. Habibur Rahman	Bio-Control Strategies: Classical, Augmentation and Conservation Means of Natural Enemies			
Dr. Md. Ahsanul Haque Swapon	Food and Chemical Lab Expo 2022	11 October 2022	Dhaka, Bangladesh	As an expert personnel on bee and honey
Dr. Md. Ahsanul Haque Swapon	3 <sup>rd</sup> National Conferences on Bee and Honey	11 October 2022	Khulna, Bangladesh	Resource speaker
Dr. Md. Ahsanul Haque Swapon	USAID F2F Food Safety and Quality Program on Small Hive Beetle Dr. Robert Owen [US Volunteer] University of Melbourne, Australia	26 November 2022	BARI, Gazipur, Bangladesh	As an expert personnel on bee and honey
Dr. Md. Ahsanul Haque Swapon	USAID F2F Food Safety and Quality Program on True and False Honey	27 November 2022	Dhaka, Bangladesh	Resource speaker



Mansura Afroz Md. Khairul Mazed	Training on Statistical Data Analysis	27-28 November 2022	BSMRAU, Bangladesh	Trainee
Dr. Md. Ahsanul Haque Swapon	World Honey Bee Day on Diversified Uses of Honey and Bee Products	28 November 2022	Webinar Conference	Resource speaker
Dr. Md. Ahsanul Haque Swapon	Plant Protection Techniques on Control Measures of Important Insects of Rice	03 December 2022	NATA, Bangladesh	Resource speaker
Dr. Md. Ahsanul Haque Swapon	Plant Protection Techniques on Control Measures of Important Insects of Major Vegetables			
Dr. Habibur Rahman	Gas Chromatography Mass Spectrophotometer (GC-MS)	07-09 December 2022	Mumbai, India	Participant
Dr. Habibur Rahman	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	12-13 December 2022	Hyderabad, India	Participant
Dr. Habibur Rahman	Pesticide Effect in Soil and Its Management	18 December 2022	NATA, Bangladesh	Resource speaker
Dr. Habibur Rahman	Industrial Waste Management	18 December 2022	NATA, Bangladesh	Resource speaker

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Shamim Hossain	Assistant Provost, Bangamata Sheikh Fazilatunnesa Mujib Hall, BSMRAU	20 March 2019 to till date
Dr. Md. Mamunur Rahman	Head, Department of Entomology, BSMRAU	23 March 2020- 22 March 2022
Dr. Md. Shamim Hossain	Head, Department of Entomology, BSMRAU	23 March 2022 to till date
Dr. Md. Mamunur Rahman	Head, Department of Biochemistry and Molecular Biology, BSMRAU	1 July 2022 -31 October 2022

### List of Publication by the Members of the Department

#### a) Journal

- Afroz, M., Amin, M. R., Miah, M. R. U., & Hossain, M. M. (2022). Effect of leaf characteristics of sweet gourd germplasms on the population abundance and infestation of epilachna beetle (*Epilachna* spp.). *Serangga*, 27(1), 72-82.
- Afroz, M., Miah, M. R. U., Hossain, M. M., & Amin, M. R. (2022). Physico-chemical leaf attributes of sweet gourd influence the infestation of red pumpkin beetle. *J. Entomol. Res.*, 46(3), 440-445.
- Ahmed, F., Amin, M. R., Rahman, M. M., Alam, M. Z., Afroz, M., & Suh, S. J. (2022). Toxicity of chemical insecticides and neem oil on cucurbit fruit fly *Bactrocera cucurbitae*. *Agricultural Sci. Digest.*, doi: 10.18805/ag.DF-491.
- Ahmed, F., Rahman, M. M., Alam, M. Z., Afroz, M., & Amin, M. R. (2022). Efficacy of selected insecticides in cucurbit fruit fly management. *Ecol. J.*, 4(1), 117-120.



- Ahmed, M., Rahman, M. A., Hoque, M. Z., Hossain, M. S., & Matsumoto, M. (2022). assessment of ecological risk through toxic heavy metal contamination in Konabari Terrace Industrial Area of Gazipur, Bangladesh. *J. Facul. Agric. Kyushu Uni.*, 67(1), 33–38.
- Amin, M. R. (2022). Occurrence of lepidopteran pollinators and pests on different crops at Gazipur in Bangladesh. *Ecol J.*, 4, 221-224.
- Amin, M. R., Oh, S. D., Afroz, M., Park, S. Y., Yun, D. W., Ryu, T. H., Lee, S. K., Ha, K., Bae, E., Kang, S., Kim, C. G., Eun, C. U., Kim, Y. K., Kim, M., Kim, D., Kim, D., & Suh, S. J. (2022). Influence of genetically modified soybean expressing epidermal growth factor on arthropod biodiversity. *GM Crops & Food.*, 13(1), 299-308.
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#### b) Book/Book Chapter

- ড. হাবিবুর রহমান (২০২২). প্রতিবন্ধকতা সৃষ্টির মাধ্যমে ইঁদুর ব্যবস্থাপনার বিজ্ঞান ভিত্তিক কার্যকরি উপায়। জাতীয় ইঁদুর নিধন অভিযান, কৃষিকথা: কৃষিবিষয়ক মাসিক ম্যাগাজিন, কৃষি তথ্য সার্ভিস, কৃষি মন্ত্রণালয়, বাংলাদেশ ৮২(৬): ১৬-১৭।

**Popular article**

Amin, M. R. 2022. এবারের বর্ষাকালীন তীব্র উষ্ণতা কৃষিতে মারাত্মক ঝুঁকি সৃষ্টি করেছে, বণিক বার্তা, ১৫ সেপ্টেম্বর ২০২২

Amin, M. R. 2022. দেশের কৃষি খাতের অগ্রগতি ও আগামীর চ্যালেঞ্জ, বণিক বার্তা, ০১ অগাস্ট ২০২২

**Postgraduate Student's Information**

Program	Number
MS	12
PhD	-
Total =	12

**Courses Offered by the Department at Undergraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	ENT 230	Insect Taxonomy & Systematics	II	03+01	Dr. Md. Ahsanul Haque Swapon Md. Khairul Mazed
Autumn	ENT 260	Insect Ecology	II	03+01	Dr. Ramiz Uddin Miah Dr. Md. Shamim Hossain
	ENT 440	Insect Pest Management	IV	03+01	Dr. Habibur Rahman Mansura Afroz
Winter	ENT 175	Insect Morphology	I	03+01	Dr. Md. Ruhul Amin Dr. Habibur Rahman
	ENT 370	Economic Entomology	III	03+01	Dr. Md. Ahsanul Haque Swapon Dr. Md. Mamunur Rahman

**Courses Offered by the Department at Postgraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	ENT 519	Insect Genetics and Molecular Biology	MS	3.0	Dr. Md. Mamunur Rahman
	ENT 531	Insect Taxonomy	MS	3.0	Dr. Md. Ruhul Amin
	ENT 547	Biological Control	MS	3.0	Dr. Md. Shamim Hossain
	ENT 561	Insect Physiology	MS	3.0	Dr. Md. Ahsanul Haque Swapon
Autumn	ENT 516	Principles of Insect Control	MS	3.0	Dr. Md. Ruhul Amin
	ENT 530	Seed Entomology	MS	3.0	Dr. Md. Ahsanul Haque Swapon
	ENT 580	Integrated Pest Management	MS	3.0	Dr. Habibur Rahman
Winter	ENT 501	Insect Morphology	MS	3.0	Dr. Md. Mamunur Rahman
	ENT 502	Insect Ecology	MS	3.0	Dr. Md. Ramiz Uddin Miah
	ENT 546	Insecticide Toxicology	MS	3.0	Dr. Habibur Rahman
	ENT 578	Industrial Entomology	MS	3.0	Dr. Md. Ruhul Amin





## Department of Genetics and Plant Breeding

[www.bsmrau.edu.bd/gpb/](http://www.bsmrau.edu.bd/gpb/)

### Faculty Members

#### Professor

Dr. Md. Golam Rasul  
 Dr. Nasrin Akter Ivy  
 Dr. A. K. M. Aminul Islam  
 Dr. Mohammad Mehfuz Hasan Saikat  
 Dr. Umakanta Sarker  
 Dr. Mohammad Sharif Raihan

#### Associate Professor

Dr. Liakat Ali

#### Assistant Professor

Farzana Mustafa Era (study leave)

### Officers and Staff

Name	Designation
Md. Rafiqul Islam	Technical Officer
Md. Masudur Rahman	Administrative Officer
Md. Abdul Hamid	Senior Specimen Collector
Jakir Shikder	Laboratory Attendant
Md. Jhirul Haque Akan	Senior MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Shams-Al-Mahmud (2015-05-3486)	Development and evaluation of inbred lines for quality grain attributes in Maize	Dr. Mohammad Sharif Raihan	Sum/22
Taa-Mim Bente Pasha (2016-05-3829)	Genetic diversity in mutant lines of yardlong bean	Dr. Mohammad Mehfuz Hasan Saikat	Sum/22
Md. Jahid Hossain (2016-05-3835)	Assessment of antioxidant properties and fruit quality of papaya breeding lines	Dr. Nasrin Akter Ivy	Sum/22
Md. Shahedul Islam (2019-08-5319)	Molecular diversity in country bean ( <i>Lablab purpureus L. sweet</i> ) genotypes using RAPD marker	Dr. Md. Golam Rasul	Sum/22
Kazi Golam Safath (2019-08-5320)	Phenotypic variation, correlation and path coefficient analysis in popular amaranth cultivars of Bangladesh	Dr. Umakanta Sarker	Sum/22
Dabasree Halder (2020-05-5711)	Morpho-molecular variation in coastal rice genotypes using RAPD marker	Dr. Md. Golam Rasul	Aut/22

**PhD Thesis**

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Susmita Banik (2007-08-1999)	Exploration of Coastal Rice Towards Developing Salt Tolerant Lines Biofortified with Zinc	Dr. Mohammad Mehfuz Hasan Saikat	Aut/22

**List of Research Project (Ongoing): Internal/External**






Name the PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Md. Golam Rasul	Development of Onion Variety through Induced Mutation	RMW 9,00,000/-	2021
Dr. Nasrin Akter Ivy	Development of New Gynodioecious Progressive Lines of Papaya”	RMW 8,50,000/-	2020
	Regional Yield Trial (RYT) of Fine Rice Advanced Line in Boro Season	RMW 5,00,000/-	2021
Dr. A.K.M. Aminul Islam	Development of Hybrid Variety of Bunchy Type Ridge Gourd ( <i>Luffa acutangula</i> )	RMW 8,04,000/-	2020
	Accelerating the Genetic Gains in Rice (AGGRi): IRRI-NARES breeding networks using rapid cycle genomic selection to deliver annual genetic gains of 2% in rice (C-2019-70)	IRRI 12,98,750/-	2020
	Development of short duration cotton varieties with high yield and lint quality	MoA 7,44,116/-	2021
	Dissemination of vegetable varieties developed by BSMRAU through single season front line demonstration	KGF 10,00,000/-	2022
Dr. Mohammad Mehfuz Hasan Saikat	Development of white brinjal mutant lines resistant to shoot and fruit borer	RMW 9,03,000	2020
	Enhancement of drought tolerance in wheat: in vitro androgenesis approach	BANBEIS, MoE 16,00,000/-	2021
Dr. Mohamman Sharif Raihan	Development of High Yielding Single Cross Maize Hybrids	RMW 9,00,000/-	2021
Dr. Liakat Ali	Development of High-yielding Semi-dwarf Aromatic Rice Genotypes	RMW 8,30,000/-	2022

**List of Research Project (Completed): Internal/External**

Name the PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. A.K.M. Aminul Islam	DNA fingerprinting of rice germplasm for salinity tolerance at seedling stage.	MoST 3,00,000/-	2022
Dr. Mohammad Mehfuz Hasan Saikat	Development of dwarf type yard long bean mutant lines	UGC 2,95,000	2022
Dr. Mohamman Sharif Raihan	Hybrid variety development of sweet gourd	UGC 2,97,000/-	2022



### List of Released Varieties/Technologies

Name of the variety	Year of Release	Salient Features	Photo
BU Papaya-4	2022	<p>All the plants bear fruits.</p> <p>Fruits of female plants are pear shaped having longitudinal depressions</p> <p>Fruits of bisexual plants are heavier, elongate in shape and long petiolated.</p> <p>Each plant bears 60-70 fruits resulting (yield 60-70 tons per hectare).</p> <p>Papain recovery is much higher.</p> <p>Sweetness of ripe papaya is higher and pulp color is deep yellow to orange.</p> <p>Shelf life of fruit is higher</p> <p>Antioxidant amount is higher.</p>	
BU Motorshuti-1	2022	<p>White flower and green pod</p> <p>5-7 green seeds/pod, 8-10 pods/plant</p> <p>Dry seeds are round, brown colored</p> <p>Peas can be collected 60-70 days after sowing</p> <p>Seed size is higher</p> <p>High yielding (16-19 tons/ha)</p>	 
BU Motorshuti-2	2022	<p>Pink flower and green pod</p> <p>6-8 seeds /pod, 6-9 pods /plant</p> <p>Dry seeds are wrinkled, light green colored</p> <p>Peas can be collected after 60-70 days after sowing</p> <p>High yielding (14-16 tons/ha)</p>	 

### List of Seminar/Workshop/Training attended (Local and Foreign)

Name of the Teacher	Program attended	Date	Country	Role/ contribution in the program
Dr. A.K.M. Aminul Islam	Present status and future prospect of Public Private Partnership (PPP), benefit access sharing of plant genetic resources in Bangladesh	12/12/2021	HRC, BARI	Resource Person
	Enhancing Integration of Private Sector Seed Companies into GoB Agricultural Research	20 <sup>th</sup> Oct. 2021	Action for Enterprise, USA	Participant



Southeast Asia (SEA) regional consultation for OneCGIAR Breeding Support Services	27 Jul 2021	CIMMYT	Participant
Product concept and product management	13 Sept 2021	IRRI	Participant
Digital data collection using FieldBook software	Sept 2021	IRRI	Participant
Enabling Tools, Technologies, and Services for Genetic Gains	27 Jul 2021	CIMMYT	Participant
Cotton Based Multiple Cropping: Prospects and Challenges	19 June 2021	CDB	Resource Person
Training on GPMS & Quality Cotton Production	May 21, 2021	CDB	Participant
Plant Breeding to develop Gender-responsive product	21 April 2021	IRRI	Participants
Collection & Management of AGGRi Network Trial Data using Digital Tools	7 March 2021	IRRI	Participant
Modern Fruit and Vegetable Varieties for Homestead Gardening	1 Feb 2022	DAE	Resource Person
Factors Considering for Potato Variety Development and Future Responsibility	14 June 2021	TCRC, BARI	Resource Person
National Biotechnology Policy (NBP), and Biosafety and Intellectual Property Right (IPR)	15/01/223	NATA	Resource Person
Workshop on Crop Improvement Program of NARS Institutes	21-22 August 2022	BARC	Expert Member

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Nasrin Akter Ivy	Head, Dept. of Genetics and Plant Breeding	18 August 2021 to till date
Dr. A.K.M. Aminul Islam	Director (Research) BSMRAU	30 June 2017 to till date

### List of Publication by the Members of the Department

#### a) Journal

- Ali, L., Jo, H., Choi, S. M., Kim, Y., Song, J. T., & Lee, J. D. (2022). Comparison of Hyperspectral Imagery and Physiological Characteristics of Bentazone-Tolerant and -Susceptible Soybean Cultivars. *Agronomy*, 12, 2241. <https://doi.org/10.3390/agronomy12102241>
- Azad, A. K., Sarker, U., Ercisli, S., Assouguem, A., Ullah, R., Almeer, R., Sayed, A. A., & Peluso, I. (2022).



- Evaluation of Combining Ability and Heterosis of Popular Restorer and Male Sterile Lines for the Development of Superior Rice Hybrids. *Agronomy*, 12, 965. doi.10.3390/agronomy12040965
- Azam, M. D., Sarker, U., & Uddin, M. S. (2022). Screening maize (*Zea mays* L.) genotypes for phosphorus deficiency at the seedling stage. *Turk. J. Agric. For.*, 46(6), 3. doi.10.55730/1300-011X.3044
- Azam, M. G., Sarker, U., Hossain, M. A., Iqbal, M. S., Islam, M. R., Hossain, M. F., Ercisli, S., Kul, R., Assouguem, A., AL-Huqail, A. A., Mohamed, R. H., & Peluso, H. I. (2022). Genetic Analysis in Grain Legumes [*Vigna radiata* (L.) Wilczek] for Yield Improvement and Identifying Heterotic Hybrids. *Plants*, 11, 1774. doi.10.3390/plants11131774
- Banik, S., Rasul, M. G., Ivy, N. A., Haque, M. M., & Hasan, M. (2022). Delineation of Bangladeshi coastal rice germplasm based on qualitative phenotypic traits. *Plant Genetic Resources*, 01-07. doi: https://doi.org/10.1017/S1479262122000090 (IF: 1.05).
- Barua, H., Saha, S. R., Ivy, N. A., Rasul, M. G., & Islam, A. K. M. A. (2022). Genetic divergence in guava (*Psidium guajava* L.) germplasm in Bangladesh. *SAARC Journal of Agriculture*, 20(1), 15-28.
- Dola, D. B., Mannan, M. A., Sarker, U., Mamun, M. A. A., Islam, T., Ercisli, S., Saleem, M. H., Ali, B., Pop, O. L., & Marc R. A. (2022). Nano-iron oxide accelerates growth, yield, and quality of Glycine max seed in water deficits. *Front. Plant Sci.*, 13, 992535. doi: 10.3389/fpls.992535
- Faysal, A. S. M., Ali, L., Azam, M. G., Sarker, U., Ercisli, S., Golokhvast, K. S., & Marc, R. A. (2022). Genetic Variability, Character Association, and Path Coefficient Analysis in Transplant Aman Rice Genotypes. *Plants*, 11, 2952. https://doi.org/10.3390/plants11212952
- Faysal, A. S. M., Ali, L., Azam, M. G., Sarker, U., Ercisli, S., Golokhvast, K. S., & Marc, R. A. (2022). Genetic Variability, Character Association, and Path Coefficient Analysis in Transplant Aman Rice Genotypes. *Plants*, 11, 2952. https://doi.org/10.3390/plants11212952
- Hasan, M. J., Kulsum, M. U., Sarker, U., Matin, M. Q. I., Shahin, N. H., Kabir, M. S., Ercisli, S., & Marc, R. A. (2022). Assessment of GGE, AMMI, Regression, and Its Deviation Model to Identify Stable Rice Hybrids in Bangladesh. *Plants*, 11, 2336. https://doi.org/10.3390/plants11182336
- Hassan, J., Jahan, F., Rajib, M. M. R., Sarker, U., Miyajima, I., Ozaki, Y., Ercisli, S., Golokhvast, K. S., & Marc, R. A. (2022). Color and physiochemical attributes of pointed gourd (*Trichosanthes dioica* Roxb.) influenced by modified atmosphere packaging and postharvest treatment during storage. *Front. Plant Sci.*, 13, 1016324. doi: 10.3389/fpls.1016324
- Hassan, J., Rajib, M. M. R., & Sarker, U. *et al.* (2022). Optimizing textile dyeing wastewater for tomato irrigation through physiochemical, plant nutrient uses and pollution load index of irrigated soil. *Sci Rep*, 12, 10088. doi.10.1038/s41598-022-11558-1
- Hossain, M. N., Sarker, U., Raihan, M. S., Al-Huqail, A. A., Siddiqui, M. H., & Oba, S. (2022). Influence of Salinity Stress on Color Parameters, Leaf Pigmentation, Polyphenol and Flavonoid Contents, and Antioxidant Activity of *Amaranthus lividus* Leafy Vegetables. *Molecules*, 27, 1821. doi.10.3390/molecules 27061821
- Islam, M. A. M., Uddin, M. B. M., Rasul, M. G., Swapon, M. A. H., Ahmed, M., & Hasan, M. (2022). *In Vitro* Screening and Field Performance of EMS-Treated Eggplants for the Selection of Shoot and Fruit Borer-Resistant Plants. *Agron.*, 12(8), 1832.
- Islam, M. R., Rahman, M. M., Mohi-Ud-Din, M., Akter, M., Zaman, E., Keya, S. S., Hasan, M., & Hasanuzzaman, M. (2022). Cytokinin and gibberellic acid-mediated waterlogging tolerance of mungbean (*Vigna radiata* L. Wilczek). *PeerJ.*, 10, e12862.
- Islam, M. Z., Galib, M. A. A., Akand, M. M., Lipi, L. F., Akter, A., Matin, M. Q. I., & Ivy, N. A. (2022). Combining ability and heterotic studies in aromatic rice through line by tester analysis. *SABRAO Journal of Breeding and Genetics*, 54 (2), 221-235.
- Jo, H., Asekova, S., Bayat, M. A., Ali, L., Song, J. T., Ha, Y. S., Hong, D. H., & Lee, J. D. (2022). Comparison



- of Yield and Yield Components of Several Crops Grown under Agro-Photovoltaic System in Korea. *Agriculture*, 12(5), 619. <https://doi.org/10.3390/agriculture12050619>
- Kulsum, U., Sarker, U., & G. Rasul, M. G. (2022). Genetic variability, heritability and interrelationship in salt tolerant lines of T Aman rice. *Genetika*, 54(2), 761-776.
- Mamun, M. A. A., Julekha, Sarker, U., Mannan, M. A., Rahman, M. M., Karim, M. A., S. Ercisli, S., Marc, R. A., & Golokhvast, K. S. (2022). Application of Potassium after Waterlogging Improves Quality and Productivity of Soybean Seeds. *Life*, 12, 1816. <https://doi.org/10.3390/life12111816>
- Maniruzzaman, S., Rahman, M. A., Hasan, M., Rasul, M. G., Molla, A. H., Khatun, H., & Akter, S. (2022). Genetic Mapping to Detect Stringent QTLs Using 1k-RiCA SNP Genotyping Platform from the New Landrace Associated with Salt Tolerance at the Seedling Stage in Rice. *Plants*, 11(11), 1409. <https://doi.org/10.3390/plants11111409> (IF: 3.933)
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- Rahman, M. M., Sarker, U., Swapan, M. A. H., Raihan, M. S., Oba, S., Alamri, S., & Siddiqui, M. H. (2022). Combining Ability Analysis and Marker-Based Prediction of Heterosis in Yield Reveal Prominent Heterotic Combinations from Diallel Population of Rice. *Agronomy*, 12, 1797. doi.10.3390/agronomy12081797.
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- Sarker, U., Oba, S., Alsanie, W. F., & Gaber, A. (2022). Characterization of Phytochemicals, Nutrients, and Antiradical Potential in Slim Amaranth. *Antioxidants*, 11, 1089. doi.10.3390/antiox11061089
- Sarker, U., Oba, S., Ercisli, S., Assouguem, A., Alotaibi, A., & Ullah, R. (2022). Bioactive Phytochemicals and Quenching Activity of Radicals in Selected Drought-Resistant *Amaranthus tricolor* Vegetable Amaranth. *Antioxidants*, 11, 578. doi.10.3390/antiox11030578
- Sarker, U., Rabbani, M. G., Oba, S., Eldehna, W. M., Al-Rashood, S. T., Mostafa, M. M., & Eldahshan, O. A. (2022). Phytonutrients, Colorant Pigments, Phytochemicals, and Antioxidant Potential of Orphan Leafy *Amaranthus* Species. *Molecules*, 27, 2899. doi.10.3390/molecules27092899
- Sumona, S. S., Khan, A. A., Bhuiyan, M. A. B., Miah, M. R. U., & Rasul, M. G. (2022). Screening of country bean genotypes against common bacterial blight and bacterial brown spot. *Ecology Journal*, 4(1), 69-77.
- Tasnim, S., Ivy, N. A., Raihan, M. S., Akter, N., Islam, M. Z., Jahan, N., & Khan, A. U. (2022). Evaluation of genetic variation in segregating population of pea (*Pisum sativum* L.). *SAARC J. Agric.*, 20(1), 29-39.



### b) Book/Book Chapter

Chakrabarty, S., Panchali Chakraborty, Tofazzal Islam, A. K. M. Aminul Islam, Juel Datta, Tuli Bhattacharjee, Jin Minghui, and Yutao Xiao. (2022). Bacillus thuringiensis Proteins: Structure, Mechanism and Biological Control of Insect Pests. M. T. Islam et al. (eds.), Bacilli in Agrobiotechnology, Bacilli in Climate Resilient Agriculture and Bioprospecting, Springer Nature. [https://doi.org/10.1007/978-3-030-85465-2\\_25](https://doi.org/10.1007/978-3-030-85465-2_25)

Hasan, M., Abdullah, H. M., Hasibuzzaman, A. S. M. and Ali, M. A. (2022). Date Palm Genetic Resources for Breeding. In *Cash Crops* (pp. 479-503). Springer, Cham.

### Current Postgraduate Student's Information

Program	Number
MS	19
PhD	07
Total =	26

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GPB 195	Cytology	II((Ag)	4.5	Dr. Mohammad Mehruz Hasan Saikat Dr. Mohammad Sharif Raihan
	GPB 310	Introductory Cytogenetics	III (Ag)	4.5	Dr Md Golam Rasul Farzana Mustafa Era
Autumn	GPB 355	Principles of Plant Breeding	III (Ag)	4.5	Prof Dr Umakat Sarker Prof Dr. Md Golam Rasul
	GPB 235	Elementary Genetics, Evaluation and Biodiversity	II((Ag)	4.5	Dr. Nasrin Akter Ivy Dr. Mohammad Sharif Raihan
Winter	GPB 465	Methods of Plant Breeding	IV (Ag)	4.5	Dr. A.K.M. Aminul Islam Dr. Mohammad Sharif Raihan
	GPB 195	Cytology	I(Ag)	3.0	Dr. Mohammad Mehruz Hasan Saikat, Dr. Mohammad Sharif Raihan

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GPB 527	Plant Breeding		3.0	Dr. M. Golam Rasul Dr. M. Mehruz Hasan Saikat
	GPB 510	Genetics		3.0	Dr. Nasrin Akter Ivy
	GPB 545	Breeding Horticultural Crops		3.0	Dr. A.K.M. Aminul Islam
	GPB 601	Advanced Cytogenetics		3.0	Dr. Umakanta Sarker



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	GPB 660	Population Genetics	3.0	Dr. A.K.M. Aminul Islam
Autumn	GPB 645	Breeding for Abiotic Stresses	3.0	Dr. M. Mehfuz Hasan Saikat
	GPB 665	Maintenance Breeding and Breeders Seed Production	3.0	Dr M. Golam Rasul
	GPB 501	Cytogenetics	3.0	Dr. Umakanta Sarker
	GPB 531	Quantitative Genetics	3.0	Dr. A.K.M. Aminul Islam
	GPB 631	Plant Biotechnology	3.0	Dr. Mohammad Sharif Raihan
	GPB/SST 655	Heterosis Breeding and Hybrid Seed Technology	3.0	Dr. Nasrin Akter Ivy
Winter	GPB 640	Advanced Plant Breeding	3.0	Dr. M. Mehfuz Hasan Saikat
	GPB 550	Molecular Genetics	3.0	Dr. M. Golam Rasul
	GPB 541	Breeding Field Crops	3.0	Dr. Umakanta Sarker
	GPB/SST 615	Plant Genetic Resources	3.0	Dr. Nasrin Akter Ivy
	GPB 650	Advanced Biometrical Genetics	3.0	Dr. A.K.M. Aminul Islam

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## Department of Horticulture

[www.bsmrau.edu.bd/hrt/](http://www.bsmrau.edu.bd/hrt/)

### Faculty Members

#### Professor

Dr. M. Mizanur Rahman  
 Dr. Mohammad Zakaria  
 Dr. Md. Azizul Hoque  
 Dr. Emrul Kayesh  
 Dr. Jahidul Hassan  
 Dr. Md. Sanaullah Biswas (Study leave)  
 Dr. Md. Fakhrul Hasan

#### Associate Professor

Md. Mijanur Rahman Rajib (Study leave)  
 Dr. Md. Shyduzzaman Roni

#### Assistant Professor

Sultan Mahmud  
 Hasina Sultana  
 Joydeb Gomasta  
 Sharmila Rani Mallick

### Officers and Staff

Name	Designation
Md. Monsur Ahmed	Senior Assistant
Md. Sanaur Rabbi	Laboratory Assistant
Md. Habibur Rahman	Senior MLSS
Md. Fazlul Hoque	Senior Mali

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Ruhul Amin Rana (19-08-5338)	Performance of growth, yield and quality of cherry tomato	Dr. Emrul Kayesh	Sum/22
Afsana Koly (14-05-3184)	Effect of organic and inorganic fertilizer on yield, quality and postharvest performance of onion	Dr. Emrul Kayesh	Sum/22
Tithi Ray (19-08-5325)	Effect of chitosan polymerase and plant probiotic bacteria on yield and storage quality of onion	Dr. Emrul Kayesh	Sum/22

### PhD Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Jannatul Ferdousi (2006-11-1839)	Combining ability and heterosis in sweet pepper ( <i>Capsicum annum</i> L)	Dr. Mohammad Zakaria	Sum/22

**List of Research Project (Ongoing): Internal/External**

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Emrul Kayesh Co-PI: Hasina Sultana	Characterization of pomegranate genotype for variety development	RMW, BSMRAU BDT 800000/-	July 2024
PI: Dr. Emrul Kayesh Co-PI: Joydeb Gomasta	Morphological, physicochemical and molecular characterization of fig genotypes in Bangladesh	MoST BDT 300000/-	July 2023
PI: Dr. Emrul Kayesh	The effects of chitosan biopolymer and plant probiotic bacteria ( <i>Paraburkholderia</i> ) on papaya cultivation	UGC BDT 300000/-	December 2023
PI: Dr. Jahidul Hassan	Development of Cost-effective Small-scale Solar Drying Techniques for Reducing Postharvest Losses of Horticultural Crops	RMW, BSMRAU BDT 900000/-	July 2023
PI: Dr. Md. Fakhrul Hasan	Collection, conservation, characterization and evaluation of seedless velvet apple germplasm	RMW, BSMRAU BDT 760000/-	June 2025
PI: Hasina Sultana	Diversifying the Utilities of Marigold as Functional Food	RMC (Innovation), BSMRAU BDT 100000.00	July 2022
PI: Sharmila Rani Mallick	Secondary Metabolites Diversity of Rose Accessions Available in Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU)	RMC (Innovation Fund), BSMRAU BDT 1,00,000/-	July 2022

**List of Seminar/Workshop/Training attended (Local and Foreign)**

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Emrul Kayesh	Increasing farmer's Income through post-harvest loss reduction of fruit and vegetables	11 May 2022	Hortex Foundation	Participant
Dr. Emrul Kayesh	Training on information rights	2 June 2022	IQAC, BSMRAU	Participant
Dr. Emrul Kayesh	Developing the Jackfruit for global consumption and markets (Online)	21 July 2022	Tropical Fruit Network, Malaysia	Participant
Dr. Jahidul Hassan	EU Food safety guideline preparation for exporting fruits and vegetables from Bangladesh	14-17 Jan. 2022	Bangladesh	Presenter
Dr. Jahidul Hassan	EU Food Safety requirement for exported Fresh Fruits and Vegetables from Bangladesh_ Guideline validation	24-25 May 2022	Bangladesh	Participants



Dr. Jahidul Hassan	Training on information rights	2 June 2022	IQAC, BSMRAU	Participant
Hasina Sultana	Training on Integrity	29 Sept., 2022	BSMRAU, Bangladesh	Trainee
Hasina Sultana	Research Planning Workshop on RMC-UGC funded Long Term Project (2022-2025)	1 Sept., 2022	BSMRAU, Bangladesh	Participant
Hasina Sultana	Seminar on 'Activities and achievements of Outreach: a tale of a year'	19 June, 2022	BSMRAU, Bangladesh	Participant
Hasina Sultana	Seminar on 'Exploring the utility of drone based multispectral imagery in agricultural research'	16 Jan, 2022	BSMRAU, Bangladesh	Participant
Joydeb Gomasta	Training on Integrity	29 Sept, 2022	BSMRAU, Bangladesh	Participant
Joydeb Gomasta	Training on Statistical Data Analysis	27-28 Nov, 2022	BSMRAU, Bangladesh	Participant
Sharmila Rani Mallick	Training on Statistical Data Analysis	27-28 Nov, 2022	BSMRAU, Bangladesh	Trainee
Sharmila Rani Mallick	Training on Integrity	29 Sept, 2022	BSMRAU, Bangladesh	Trainee
Sharmila Rani Mallick	Research Planning Workshop on RMC-UGC funded Long Term Project (2022-2025)	1 Sept., 2022	Bangladesh	Participant
Sharmila Rani Mallick	Seminar on 'Activities and achievements of Outreach: a tale of a year'	19 June, 2022	BSMRAU, Bangladesh	Participant
Sharmila Rani Mallick	Seminar on 'Exploring the utility of drone based multispectral imagery in agricultural research'	16 Jan., 2022	Bangladesh	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Jahidul Hassan	Head, Dept. of Horticulture	01 June 2021 till date
Dr. Md. Azizul Hoque	Director (Transport)	01-08-2021 to till date
Dr. Md. Azizul Hoque	Coordinator Seed science & Technology Unit	12-11-2021 to till date
Dr. Emrul Kayesh	Director (Outreach)	08-07-2021 to till date

### List of Publications by the Members of the Department

#### a) Journal

Hassan J, Jahan F, Rajib MMR, Sarker U, Miyajima I, Ozaki Y, Ercisli S, Golokhvast KS and Marc RA. (2022). Color and physiochemical attributes of pointed gourd (*Trichosanthes dioica* Roxb.)



- influenced by modified atmosphere packaging and postharvest treatment during storage. *Front. Plant Sci.* 13:1016324. <https://doi.org/10.3389/fpls.2022.1016324>.
- Hassan, J., Miyajima, I., Ozaki, Y., Mizunoe, Y. and Sakai, K. (2022). Homogeneous triploid and tetraploid production through crossing with mixoploid parents in pointed gourd (*Trichosanthes dioica* Roxb.). *Euphytica*. 218:17. <https://doi.org/10.1007/s10681-021-02961-2>
- Hassan, J., Rajib, M.M.R., Sarker, U., Akter, M. Khan, M.N.E.A, Khandaker, S., Khalid, F., Rahman, G.K.M.M, Ercisli, S., Muresan, C.C. and Marc, R.A. (2022). Optimizing textile dyeing wastewater for tomato irrigation through physiochemical, plant nutrient uses and pollution load index of irrigated soil. *Sci Rep.* 12, 10088. <https://doi.org/10.1038/s41598-022-11558-1>
- Hoque, F., Kamruzzaman, M., Rana, MJ., Hassan, MK., and Hassan, J. (2022). Yield gap in bitter gourd production: A perspective of farm-specific efficiency in Narsingdi district in Bangladesh. *Social Sciences & Humanities Open*. 6(1):100335. <https://doi.org/10.1016/j.ssaho.2022.100335>.
- Joaty, J. Y., Rahman, M. M., Amin, M. R., Khan, M. A. R & Hassan, J. (2022). Mitochondrial DNA based Phylogeny and Haplotype networking of European Honeybee *Apis mellifera* L. in Bangladesh. *Serangga*, 27(3): 220-237. <https://ejournals.ukm.my/serangga/index>.
- Rano, SH., Rahman, MM., Rahman, H., Ghosh, TK. and Hassan, J. (2022). Molecular Confirmation of Two Honeybee Species (*Apis Mellifera* L. and *A. Cerana* F.) in Apiary and Their Foraging Behavior in Litchi Orchard. *Malaysian Journal of Sustainable Agricultures*. 6(1): 65-71. <https://doi.org/10.26480/mysj.01.2022.65.71>.
- Riaz, G.M., M.M. Rahman and J. Hassan. (2022). Insecticidal Exposures Modulates the Beneficial Insect's Biodiversity in Agroecosystem. *Tropical Agroecosystems (TAEC)*. 3(1): 1-6. DOI: <http://doi.org/10.26480/taec.01.2022.01.06>
- Sultana, J., Rahman, MM., Swapon, MAH., Ahamed, T. and Hassan, J. (2022). Diversity and Functions of Ants (Hymenoptera: Formicidae) in Bangabandhu Sheikh Mujibur Rahman Agricultural University Campus of Bangladesh. *Tropical Agroecosystems*. 3(1): 34-40. <https://doi.org/10.26480/taec.01.2022.34.40>.

#### **b) Book/Book Chapter**

- Hassan, J., Khan, M. N. , Rajib, M. M. R. , Suborna, M. N. , Akter, J., & Hasan, M. F. A. 2022. Sustainable Horticultural Waste Management: Industrial and Environmental Perspective. In (Ed.), Pectins [Working Title]. *IntechOpen*. <https://doi.org/10.5772/intechopen.101689>
- Jaman, M. J.; Hasan, M. F.; 1Robbani, M.; Masumbillah, T. R.; Ferdous, K. and Rajib, M. M. N. E. A. Khan, J. Hassan, M. S. Biswas, H. I. Khan, H. Sultana, M. N. Suborna, M. M. R. Rajib, J. Akter, J. Gomasta and A. A. M. Anik. (2022). Morphological and anatomical characterization of colchicine induced polyploids in watermelon. *Horticulture, Environment and Biotechnology*, 64(3) (Accepted).
- M.R. 2022. Maturity Indices Color Chart and Quality Assessment of Mango (*Mangifera indica* cv. Mallika). *International Journal of Scientific and Research Publications* 12 (7):230-238.
- Quamruzzaman, A.K.M., Islam, F., Akter, L. and Mallick, S.R. (2022) Effect of Maturity Indices on Growth and Quality of High Value Vegetables. *American Journal of Plant Sciences*, 13, 1042-1062. <https://doi.org/10.4236/ajps.2022.137069>
- Quamruzzaman, A.K.M., Islam, F., Akter, L., Hossain, M.S. and Mallick, S.R. (2022). Effect of Different Nethouses on the Incidence of Insect on Vegetable Crops. *Advances in Entomology*, 10, 223-232. <https://doi.org/10.4236/ae.2022.103016>
- Quamruzzaman, AKM.; Islam, F.; Akter, L.; Khatun, A.; Mallick, S.R.; Gaber, A.; Laing, A.; Brestic, M.; Hossain, A. Evaluation of the Quality of Yard-Long Bean (*Vigna unguiculata* sub sp. *sesquipedalis* L.) Cultivars to Meet the Nutritional Security of Increasing Population. *Agronomy* 2022, 12, 2195.



<https://doi.org/10.3390/agronomy12092195>

- Rahman M.M., Rabbani M.G., Ahmed F., Rahman A., Uddin M.S. and Gomasta, J. (2022). Morphological characterization of sixty mango (*Mangifera indica*) germplasm of Bangladesh. *International Journal of Plant & Soil Science*, 34(23): 570-586. DOI: 10.9734/IJPSS/2022/v34i232463
- Roni, M. S., M. H. Rifat, M. Zakaria, M. M. R. Rajib, E. Kayesh and M. R. Amin. 2022. Assessing nutritional quality and shelf life of broccoli cultivars. *J. Food and Nutritional Sciences*. 10(1): 14-18.
- Roni, M.S., Rifat M., Zakaria M., Rajib M., Mijanur R., Kayesh E. and Amin M. (2022). Assessing Nutritional Quality and Shelf life of Broccoli Cultivars. *Journal of Food and Nutrition Sciences*. 10. 14. 10.11648/j.jfns.20221001.13.
- Sultana N., Mannan M.A., Khan S.A.K.U., Gomasta J. and Roy T. (2022). Effect of different manures on growth, yield and profitability of small scale brinjal (egg-plant) cultivation in gunny bag. *Asian Journal of Agricultural and Horticultural Research*, 9(1): 52-60. DOI: 10.9734/AJAHR/2022/v9i130136
- Uddin, M.J; Rabbani, M; Hasan, M.F., Rahman, H.; Hasan, M.N. and Islam, S.M.A. (2022). Isolation, screening and molecular identification of antagonistic bacteria against *Colletotrichum gloeosporioides* in mango. *Archives of Agriculture and Environmental Science* 7(3): 432-439.

### Postgraduate Student's Information

Program	Number
MS	03
PhD	01
Total =	04

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	HRT-105	Fundamentals of Horticulture	BS (Ag)	2	Dr. Jahidul Hassan, Dr. Fakhrul Hasan
	HRT-415	Propagation and nursery management	BS (Ag)	4.5	Dr. Jahidul Hassan, Dr. Md. Shyduzzaman Roni
Autumn	HRT-255	Vegetables and spices production	2 <sup>nd</sup> Year Autumn	3+1.5 3+1.5	Dr. Mohammad Zakaria Dr. Md. Azizul Hoque Joydeb Gomasta
	HRT-131	Introductory horticulture	1 <sup>st</sup> Year Autumn (AERD)	3+1.5	Dr. Emrul Kayesh Hasina Sultana Sharmilla Rani Mallick
	HRT-280	Fruits and plantation crop production	2 <sup>nd</sup> Year Autumn	3+1.5	Dr. Emrul Kayesh Joydeb Gomasta Sharmilla Rani Mallick
Winter	HRT-370	Floriculture and landscape horticulture	3 <sup>rd</sup> Year Winter	3+1.5	Dr. Mohammad Zakaria Dr. Md. Azizul Hoque

**Courses Offered by the Department at Postgraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	HRT 541	Research Methodology	MS & Ph.D	3.0	Dr. Jahidul Hassan
	HRT 501	Principles of Vegetable Production	MS & Ph.D	3.0	Dr. Mohammad Zakaria
	HRT 611	Physiology of Horticultural Crops	MS & Ph.D	3.0	Md. Mizanur Rahman Rajib
	HRT 642	Nutrition of Horticultural Crops	MS & Ph.D	3.0	Dr. Emrul Kayesh
Autumn	HRT 516	Ornamental Horticulture	MS & Ph.D	3.0	Dr. Md. Azizul Hoque
	HRT 601	Plant Tissue Culture	MS & Ph.D	3.0	Dr. Jahidul Hassan
	HRT 651	Organic Farming	MS & Ph.D	3.0	Dr. Emrul Kayesh
	HRT 511	Spices and Plantation Crops	MS & Ph.D	3.0	Dr. Mohammad Zakaria
	HRT 506	Principles of Fruit Production	MS & Ph.D	3.0	Dr. Emrul Kayesh
Winter	HRT-606	Homestead Gardening	MS & Ph.D	3.0	Dr. Jahidul Hassan
	HRT/ SST 631	Vegetable Seed Technology	MS & Ph.D	3.0	Dr. Md. Azizul Hoque



## Department of Plant Pathology

[www.bsmrau.edu.bd/plp](http://www.bsmrau.edu.bd/plp)

### Faculty Members

#### Professor

Dr. Md. Abu Ashraf Khan  
 Dr. Md. Mahidul Islam Masum  
 Dr. Md. Motaher Hossain  
 Dr. Md. Abdullahil Baki Bhuiyan

#### Associate Professor

Dr. Rayhanur Jannat  
 Dr. Afsana Hossain  
 Md. Tanbir Rubayet

#### Assistant Professor

Md. Farhad Hossain  
 Dr. Shaikh Sharmin Siddique  
 Md. Abdul Kader

#### Lecturer

Preangka Saha Briste

### Officers and Staff

Name	Designation
Nur Mohammed Khan	Technical Officer
Md. Jamil Hossain Khan	Office Assistant Cum Computer Operator
Md. Atowar Rahman	Specimen Collector
Md. Dulal Hossain	Lab Attendant
Md. Masud Rana	MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Md. Mejbah Uddin Mubin (2016-05-3813)	Status of Seed-Borne Fungal Infestation in Rice Seeds and Characterization of Bakanae Pathogen <i>Fusarium proliferatum</i> and Its Control	Dr. Md. Abu Ashraf Khan	Win/22
Md. Robiul hasan (2019-11-5346)	Biofilm producing phyllosphere bacteria for potential application in biological control of <i>magnaporthe oryzae</i> in rice	Dr. Md. Motaher Hossain	Aut/21

**List of Research Project (Ongoing): Internal/External**

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Md. Abu Ashraf Khan Co-PI: Md. Abdul Kader	Status of <i>Fusarium</i> spp. infestation in rice seeds and its characterization and control.	RMW, BSMRAU BDT 1100000.00	2021
PI: Dr. Md. Mahidul Islam Masum Co-PI: Md. Tanbir Rubayet	Antimicrobial potential and mechanistic actions of marine macroalgae associated bacteria and bio-inspired nanoparticles against major pathogens of rice in Bangladesh	RMW, BSMRAU BDT 1100000.00	2021
PI: Dr. Md. Motaher Hossain	Improvement of Rust Resistance in Two Potential Soybean Cultivars by Introgression of <i>Rpp</i> Genes	RMW, BSMRAU BDT 900000.00	2020
PI: Dr. Md. Motaher Hossain	Phyllosphere Bacteria for Plant growth Promotion and Suppression of Anthracnose Disease in Cucumber	MoST, GoB BDT 200000.00	2021
PI: Dr. Md. Motaher Hossain	Carrageenan as a promoter of Plant growth and elicitor of natural defenses in rice plant	UGC BDT 300000.00	2022
PI: Dr. Shaikh Sharmin Siddique Co-PI: Dr. Afsana Hossain	Control of <i>Cercospora</i> leaf spot of Naturally Infected Indian spinach	RMW, BSMRAU BDT 760000.00	2022

**List of Research Project (Completed): Internal/External**

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. Md. Mahidul Islam Masum Co-PI: Dr. Shaikh Sharmin Siddique	Fungal and Algal Assisted Synthesis of Zinc Oxide Nanoparticles and Titanium Dioxide Nanoparticles and their inhibition against Soil-borne Plant Pathogens	MoST, GoB BDT 200000.00	2022
PI: Dr. Md. Motaher Hossain	Isolation and evaluation of biofilm producing endophytic bacteria with potential application for biological control of <i>Magnaporthe oryzae</i> in rice	BANBEIS BDT 1800000.00	2022
PI: Preangka Saha Briste	Isolation and characterization of antagonistic bacteria from chilli phyllosphere for the biocontrol of <i>Colletotrichum capsici</i>	RMW, BSMRAU BDT 100000.00	2022

**List of Seminar/Workshop/Training Attended (Local and foreign)**

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Afsana Hossain	Training course On Seed health	18/01/2022 to 1/02/2022	Bangladesh	Trainer
Dr. Shaikh Sharmin Siddique	Training on Statistical Data Analysis	27/11/2022 to 28/11/2022	Bangladesh	Trainee





Dr. Shaikh Sharmin Siddique	Training on National Integrity Strategy	29/09/2021	Bangladesh	Trainee
Dr. Shaikh Sharmin Siddique	Training course On Seed health	18/01/2022 to 1/02/2022	Bangladesh	Trainer
Preangka Saha Briste	Scientific writing, IQAC, BSMRAU	13-17 Feb, 2022	Bangladesh	Trainee

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Abu Ashraf	Dean, Graduate Studies	10-06-2020 to 09-06-2022
Dr. Md. Mahidul Islam Masum	Head, Department of Plant Pathology	2021-2022
Dr. Md. Motaher Hossain	Additional Director, IQAC, BSMRAU	14-11-2021 to Till Now
Dr. Afsana Hossain	Assistant Provost, Bangamata Sheikh Fazilatunnesa Mujib Hall	April, 2022 to till date
Dr. Shaikh Sharmin Siddique	Assistant Provost, Female Hall (Temporary).	June 2021-ongoing

### List of Publication by the Members of the Department

#### a) Journal

- Alam, M. D., Islam, A., Hossain, M. S., Hossain, A., Akhter, D., Haider, M. M., & Xu, Y. (2022). Mental health outcomes and associated factors among vaccinated and unvaccinated teachers against COVID-19 infection in Bangladesh. *Frontiers in Psychiatry*, 13, 896419.
- Bhuiyan, M. A. B., Islam, S.M.N., Kader, M. A., Chowdhury, M. Z. H., Alam, M. Z., Abdullah, H. M., & Jenny, F. (2022). First Report of *Pestalotiopsis microspora* Causing Leaf Blight of Banana in Bangladesh. *Plant disease*. 106 (5), 1518.
- Briste, P. S., Akanda, A. M., Bhuiyan, M. A. B., Mahmud, N. U., & Islam, T. (2022). Morphomolecular and cultural characteristics and host range of *Lasiodiplodia theobromae* causing stem canker disease in dragon fruit. *J. Basic Microbiol.*, 689-700.
- Hari, S. B., Briste, P. S., Sumi, A. A., Mosharaf, M. K., Paul, S. I., Masum, M. M. I., & Jannat, R. (2022). Endophytic bacteria isolated from medicinal plants induce plant growth promotion and southern blight disease suppression in tomato. *J. Plant Pathol.*
- Hari, S. B., Briste, P. S., Sumi, A. A., Mosharaf, M. K., Paul, S. I., Masum, M. M. I., & Jannat, R. (2022). Endophytic bacteria isolated from medicinal plants induce plant growth promotion and southern blight disease suppression in tomato. *J. Plant Pathol.*, 1-14.
- Hossain, M. M. (2022) Wheat blast: A review from a genetic and genomic perspective. *Front Microbiol.*, 13, 983243. doi: 10.3389/fmicb.2022.983243
- Hossain, M. M., Yasmin, L., Rubayet, M. T., Akamatsu, H., & Yamanaka, N. (2022) A major variation in the virulence of Asian soybean rust pathogen (*Phakopsora pachyrhizi*) in Bangladesh. *Plant Pathology*, 71, 1355– 1368. <https://doi.org/10.1111/ppa.13568>
- Jahan, R., Siddique, S. S., Jannat, R., & Hossain, M. M. (2022) Cosmos white rot: First characterization, physiology, host range, disease resistance, and chemical control. *Journal of Basic Microbiology*, 62, 911– 929.
- Jahan, R., Siddique, S. S., Jannat, R., & Hossain, M. M. (2022). Cosmos white rot: First characterization,



- physiology, host range, disease resistance, and chemical control. *J. of Basic Microbiol.*, 1–19. <https://doi.org/10.1002/jobm.202200098>
- Kader, M. A., Mubin, M. M. U., Rubayet, M. T., Khan, A. A., & Hossain, M. M. (2022). First report of web blight of *Lablab purpureus* caused by *Rhizoctonia solani* AG-5 in Bangladesh. *New Dis. Report.*, 46(2), ee12129. <https://doi.org/10.1002/ndr2.12129>
- Rahman, M. M., Mostofa, M. G., Das, A. K., Anik, T. R., Keya, S. S., Ahsan, S. M., Khan, M. A. R., Ahmed, M., Rahman, M. A., Hossain, M. M., & Tran, L. S. P. (2022). Ethanol Positively Modulates Photosynthetic Traits, Antioxidant Defense and Osmoprotectant Levels to Enhance Drought Acclimatization in Soybean. *Antioxidants*, 11 (3), 516
- Rahman, M. S., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M. M., Rubayet, M. T., Biswas, J. C., Karim, M. A., & Miah, M. G. (2022). Rice demands higher nitrogen fertilizer during grain filling stage under elevated atmospheric CO<sub>2</sub> condition. *Australian J. Crop Sci.*, 16(11), 1234-1242.
- Rahman, M. S., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M. M., Biswas, J. C., Rubayet, M. T., Karim, M. A., & Miah, M. G. (2022). Incidence and severity of rice sheath blight disease under elevated carbon dioxide and nitrogen management. *J. Plant Biol. Agron.*, 1(1), 101.
- Rokonuzzaman, M., Shimul, M. T. N., Hasan, S. S., Khan, M. A. R., Rana, J., & Bhuiyan, M. A. B. (2022). Study on causes and impact of migration of garo people lifestyle. *Turkish journal of agriculture-food science and technology*, 10 (6),1026-1033.
- Roy, K., Khan, A. A., Rubayet, M. T., & Haque, M. M. (2022). Production of quality seeds of chilli using soil amendments. *Asian J. Agric.*, 6 (1), 7-14. doi: 10.13057/asianjagric/g060102
- Sultana, F., & Hossain, M. M. (2022) Assessing the potentials of bacterial antagonists for plant growth promotion, nutrient acquisition, and biological control of Southern blight disease in tomato. *PLoS one*, 17(6), e0267253.
- Sumona, S. S., Khan, A. A., Bhuiyan, M. A. B., Miah, M. R. U., & Rasul, M. G. (2022). Screening of country bean genotypes against common bacterial blight and bacterial brown spot. *Ecol. J.*, 4 (1), 67-75.
- Zhang, Y., Masum, M. M. I., Gao, C. Cheng, Y., & Guan, J. (2022). Ozone reduces the fruit decay of postharvest winter jujube by altering the microbial community structure on fruit surface. *Microbiol. Res.*, 262, 127110.

#### b) Book/Book Chapter

- Hossain, M. M. (2022). Biological Management of Plant Diseases by Non-pathogenic *Phoma* spp. In: Rai, M., Zimowska, B., Kövics, G.J. (eds) *Phoma: Diversity, Taxonomy, Bioactivities, and Nanotechnology*. Springer, Cham. [https://doi.org/10.1007/978-3-030-81218-8\\_15](https://doi.org/10.1007/978-3-030-81218-8_15)
- Sultana, F. & Hossain, M. M. (2022). Diseases of Vegetables Caused by *Phoma* spp. In: Rai, M., Zimowska, B., Kövics, G.J. (eds) *Phoma: Diversity, Taxonomy, Bioactivities, and Nanotechnology*. Springer, Cham. [https://doi.org/10.1007/978-3-030-81218-8\\_6](https://doi.org/10.1007/978-3-030-81218-8_6)

#### Postgraduate Student's Information

Program	Number
MS	10
PhD	-
Total =	10



### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	PLP 212	Fundamentals of Plant Pathology	2 <sup>nd</sup> year	3+1.5	Dr. Afsana Hossain Md. Abdul Kader
Autumn	PLP 440	Diseases of Vegetables and Plantation Crops	4 <sup>th</sup> year	4.5	Dr. Md. Motaher Hossain
	PLP 340	Diseases of Field Crops	3 <sup>rd</sup> year	4.5	Dr. Md. Abu Ashraf Khan Md. Tanbir Rubayet
Winter	PLP 480	Post Harvest Pathology	4 <sup>th</sup> year	3+1.5	Md. Abdul Kader Dr. Shaikh Sharmin Siddique
	PLP 290	Principles of Plant Pathology	2 <sup>nd</sup> year	2	Dr. Md. Mahidul Islam Masum Preangka Saha Briste

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	PLP 540	General Microbiology	MS	3.0	Dr. Md. Mahidul Islam Masum
	PLP 502	Epidemiology & Plant Disease Control	MS	3.0	Dr. Md. Motaher Hossain Dr. Md. Mahidul Islam Masum
Autumn	PLP 507	Soil-borne Diseases	MS	3.0	Dr. Shaikh Sharmin Siddique
	PLP 506	Seed Pathology	MS & PhD	3.0	Dr. Md. Abu Ashraf Khan
	PLP505	Genetics of Plant Pathogens and Disease Resistance	MS	3.0	Dr. Md. Mahidul Islam Masum
	598/698	Seminar	MS & PhD	1.0	Dr. Md. Motaher Hossain Dr. Md. Rafiqul Islam
Winter	PLP 503	Plant Pathogenesis	MS & PhD	3.0	Dr. Md. Abu Ashraf Khan
	PLP 541	Plant Bacteriology	MS	3.0	Md. Mahidul Islam Masum Dr. Afsana Hossain



## Department of Soil Science

www.bsmrau.edu.bd/ssc

### Faculty Members

#### Professor

Dr. GKM Mustafizur Rahman  
Dr. Md. Shafiqul Islam  
Dr. Md. Yunus Miah  
Dr. Md. Mizanur Rahman  
Dr. Mohammed Saiful Alam  
Dr. Mohammed Ziauddin Kamal

#### Associate Professor

Dr. Md. Humayun Kabir

#### Assistant Professor

Md. Dhin Islam  
Mahmuda Akter

#### Lecturer

Mariam Khanam  
Bushra Islam Binte  
Md. Ashraful Alam

### Officers and Staff

Name	Designation
Md. Rezaul Karim	UDA
Md. Shahin Alam	Classroom Attendant
Md. Kamal Hossain	Senior MLLS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Kazi Ummey Hani	The role of IPNS based nutrient management for enhancing carrot productivity and soil fertility	Dr. Mohammed Ziauddin Kamal	Win/21
Anuradha Chakraborty Parama	Influence of organic and inorganic fertilizer on onion production and soil health	Dr. GKM Mustafizur Rahman	Win/21

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. GKM Mustafizur Rahman	Risk Assessment of Heavy Metal Contamination in Soils and Different Vegetables Grown in Industrial Contaminated Areas of Gazipur District	RMW, BSMRAU BDT 900000.00	2020



Dr. GKM Mustafizur Rahman	Heavy Metal and Ecological Risk Assessment of the Water and Sediments of Commercial Fishponds	MoST, GoB BDT 250000.00	2021
Dr. Md. Mizanur Rahman	South Asian Nitrogen Hub	GCRF, UK BDT 3.5 crore	2019
Dr. Md. Mizanur Rahman	Modeling Climate Change Impact on Bangladesh Agriculture (MCCA, CRP II, 2 <sup>nd</sup> phase)	KGF BDT 10.0 crore	2020

### List of Research Project (Completed): Internal/External

Name of the PI	Title of the Project	Funding Source with Budget	Completion Year
Bushra Islam Binte	Effect of Different Tillage and Organic Manure on Soil Fertility and Yield of Tomato	MoST, GoB BDT 80000.00	2022
Md. Ashraful Alam	Effect of Foliar Application of Selenium on Growth and Yield of Boro Rice	RMW, BSMRAU BDT 100000.00	2022
Md. Ashraful Alam	Effect of Silicon on Growth and Yield of Boro Rice	MoST, GoB BDT 75000.00	2022

### List of Seminar/Workshop/Training Attended (Local and foreign) (Year 2022)

Name of the Teacher	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Mizanur Rahman	UKRI GCRF South Asian Nitrogen Hub- Annual Workshop	27-11-22 to 30-11-22	Maldives	Paper presenter and planning of future research as a country lead of the SANH Program in Bangladesh.
Dr. Mohammed Saiful Alam	UKRI GCRF South Asian Nitrogen Hub- Annual Workshop			Paper presenter and planning of future research activities for BSMRAU component

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. G.K.M. Mustafizur Rahman	Dean, Graduate Studies, BSMRAU	June 09, 2022 – to date
Dr. G.K.M. Mustafizur Rahman	Member, Research Monitoring, Evaluation and Labor Distribution Committee, BSMRAU	From July 2017 – to date
Dr. Md. Humayun Kabir	Head, Department of Soil Science, BSMRAU	May 2021 – to date
Dr. Md. Humayun Kabir	Assistant Provost, Shaheed Tajuddin Ahmad Hall, BSMRAU	January 12, 2022 – to date

### List of Publication by the Members of the Department

#### a) Journal

Hasnat, M., Alam, M. A., Khanam, M., Binte, B. I., Kabir, M. H., Alam, M. S., Kamal, M. Z. U., Rahman, G. K. M. M., Haque, M. M., & Rahman, M. M. (2022). Effect of Nitrogen Fertilizer and Biochar on Organic Matter Mineralization and Carbon Accretion in Soil. *Sustainability*, 14(6), 3684. doi: <https://doi.org/10.3390/su14063684>

Hena, H., Khanam, M., Rahman, G. K. M. M., Afrad, M. S. I., & Alam, M. S. (2022). Isolation and characterization



- of salt tolerant bacteria from saline soils of Bangladesh. *Eurasian Journal of Soil Science*, 11 (4), 284-294. doi: 10.18393/ejss.1108521
- Islam, S. M., Gaihre, Y. K., Islam, M. R., Ahmed, M. N., Akter, M., Singh, U., & Sander, B. O. (2022). Mitigating greenhouse gas emissions from irrigated rice cultivation through improved fertilizer and water management. *Journal of Environmental Management*, 307, 114520. doi: [10.1016/j.jenvman.2022.114520](https://doi.org/10.1016/j.jenvman.2022.114520)
- Islam, S. M., Gaihre, Y. K., Islam, M. R., Akter, M., Al Mahmud, A., Singh, U., & Sander, B. O. (2020). Effects of water management on greenhouse gas emissions from farmers' rice fields in Bangladesh. *Science of the Total Environment*, 734, 139382. doi: [10.1016/j.scitotenv.2020.139382](https://doi.org/10.1016/j.scitotenv.2020.139382)
- Khanam, M., Alam, M. S., Kamal, M. Z. U., Akter, M., Binte, B. I., & Alam, M. A. (2022). Efficacy of Organic and Inorganic Fertilizers on Growth, Yield and Nutrient Uptake of Cauliflower in Acidic Soil of Bangladesh. *European Journal of Agriculture and Food Sciences*, 4(3), 24–29. doi: <https://doi.org/10.24018/ejfood.2022.4.3.500>
- Khanam, M., Solaiman, A. R. M., Rahman, G. K. M. M., Haque, M. M., & Alam, M. S. (2022). Effect of Plant Growth Promoting Bacteria on Growth and Nutrient Content of Rice. *Asian Journal of Advances in Agricultural Research*, 19(2), 20-29. doi: <https://doi.org/10.9734/ajaar/2022/v19i230242>
- Habib, M. A., Mannan, M. A., Karim, M. A., Mamun, M. A. A., Dola, D. B., Miah, M. Y., Miah, M. M. U., Ferdous, J., & Sing, H. P. (2022). Water deficit stress tolerance assessment in barley cultivars using drought tolerance indices. *J. Agriculture and Crops*, 8(4), 228-235 doi: <https://doi.org/10.3286/jac.84.228.235>
- Alam, M. N. E., Salam, M. A., Dewanjee, S., Hasan, M. F., Rahman, H., Rak, A. E., Islam, A. R. M. T., & Miah, M. Y. (2022). Distribution, concentration and risk assessment of trace metals in surface sediment of a tropical Bangladeshi soil. *Sustainability*, 14, 5033 doi: <https://doi.org/10.3390/su14095033>
- Rahman, M. M., Kamal, M. Z. U., Ranamukhaarachchi, S., Alam, M. S., Alam, M. K., Khan, M. A. R., Islam, M. M., Alam, M. A., Jiban, S. I., Mamun, M. A. A. & Abdullah, H. M. (2022). Effects of Organic Amendments on Soil Aggregate Stability, Carbon Sequestration, and Energy Use Efficiency in Wetland Paddy Cultivation. *Sustainability*, 14(8), 4475. doi: <https://doi.org/10.3390/su14084475>
- Salma, U., Alam, M. S., Khanam, M., Solaiman, A. R. M., Zakaria, M., Rahman, G. K. M. M., & Rahman, M. M. (2022). Effect of Organic Manures and Mineral Fertilizers on Soil Properties and Yield of Sweet Pepper (*Capsicum annum L.*). *Asian Journal of Soil Science and Plant Nutrition*, 8(2), 32-43. doi: <https://doi.org/10.9734/ajssp/2022/v8i230137>
- Yousuf, M. N., Karim, A. J. M. S., Solaiman, A. R. M., Islam, S., & Zakaria, M. (2022). Effect of soil moisture level on yield and nutrient balance sheet of black cumin. *Bangladesh J. Agril. Res.*, 46 (1), 43-61.
- Hossain, M. A., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M. M., Khan, M. A. R., Biswas, J. C., & Karim, M.A. (2022). Rice growth and yield characteristics under elevated carbon dioxide and nitrogen management. *Agronomy Research*, <https://doi.org/10.15159/AR.22.060>
- Talukder, S., Mamun, M. A. A., Hossain, M. S., Khan, M. A. R., Rahman, M. M., Talukder, M. R., Haque, M. M., & Biswas, J. C. (2022). Duration of low temperature changes physiological and biochemical attributes of rice seedlings. *Agronomy Research*, <https://doi.org/10.15159/AR.22.051>
- Biswas, J. C., Haque, M. M., Hossain, M. B., Maniruzzaman, M., Zahan, T., Rahman, M. M., Sen, R., Istiaque, S., Chaki, A. K., Ahmed, I. M., Akhtar, S., Ahmed, F., Hossain, M. F., Akhter, S., Kamruzzaman, M., Biswas, J. K., Alsuhaibani, A. M., Gaber, A., & Hossain, A. (2022). Seasonal variations in grain yield, greenhouse gas emissions and carbon sequestration for maize cultivation in Bangladesh. *Sustainability*, 14, 9144. <https://doi.org/10.3390/su14159144>
- Biswas, J. C., Maniruzzaman, M., Haque, M. M., Hossain, M. B., Naher, U. A., Akhtar, S., Rahman, M. M., Akhter, S., Ahmed, F., & Biswas, J. K. (2022). Greenhouse gas emission from paddy field in Bangladesh compared to top twenty rice producing countries and emission reduction strategies. *Paddy and Water Environment*, <https://doi.org/10.1007/s10333-022-00899-2>



- Bansal, S., Raghuram, N., Adhya, T. K., Rahman, M. M., Tshering, D., Dahal, K. R., Wakeel, A., Shazly, A., Safi, Z., Nissanka, S., Pathak, H., Aziz, T., Naher, U. M., Dandeniya, W. S., Biswas, J. C., Taneja, J., Panda, A. N., Kaushik, H., Jain, N., Skiba, U., Ramachandran, R., & Sutton, M. A. (2022). Long-term trends of direct nitrous oxide emission from fuel combustion in South Asia. *Environmental Research Letters*, 17, 045028.
- Ferdous, J., Ahamed, T., Miah, M. M. U., & Rahman, M. M. (2022). Performance of Radish in Aonla based Multistoried Agroforestry System. *European Journal of Agriculture and Food Sciences*, 4(3), 9-16. <https://doi.org/10.24018/ejfood.2022.4.3.459>
- Miah, M. M. U., Uddin, M. H., Miah, M. G., Rahman, M. M., Ahmed, M., & Matsumoto, M. (2022). Changes of soil physical and chemical properties in aonla based multistoried agroforestry system. *Journal of Faculty of Agriculture, Kyushu University*, 67(1), 39-51.
- Islam, H. M. T., Islam, A. R. M. T., Shahid, S., Alam, G. M. M., Biswas, J. C., Rahman, M. M., Roy, D. K., & Kamruzzaman, M. (2022). Future precipitation projection in Bangladesh using SimCLIM climate model: a multimodel ensemble approach. *International Journal of Climatology*. <https://doi.org/10.1002/joc.7605>
- Rahman, M. S., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M. M., Biswas, J. C., Rubayet, M. T., Karim, M. A., & Miah, M. G. (2022). Incidence and Severity of Rice Sheath Blight Disease under Elevated Carbon Dioxide and Nitrogen Management. *Journal of Plant Biology and Agronomy*, 1(1), 101.
- Rahman, M. M., Kamal, M. Z. U., Ranamukhaarachchi, S., Alam, M. S., Alam, M. K., Khan, M. A. R., Islam, M. M., Alam, M. A., Jiban, S. I., Mamun, A. A., Abdullah, H. M., Biswas, J. C., Akhter, S., Naher, U. M., Maniruzzaman, M., Haque, M. M., & Ahmed, F. (2022). Effects of organic amendments on soil aggregate stability, carbon sequestration and energy use efficiency in wetland paddy cultivation. *Sustainability*, 14, 4475. <https://doi.org/10.3390/su14084475>
- Anik, A. R., Begho, T., Sharna, S. C., Eory, V., & Rahman, M. M. (2022). Toward improving nitrogen use efficiency in rice production: The socioeconomic, climatic and technological determinants of briquette urea adoption. *Renewable Agriculture and Food Systems*, 1–12. <https://doi.org/10.1017/S1742170522000060>
- Rahman, M. M., Biswas, J. C., Sutton, M. A., Drewer, J., & Adhya, T. K. (2022). Assessment of Reactive Nitrogen Flows in Bangladesh's Agriculture Sector. *Sustainability*, 14, 272. <https://doi.org/10.3390/su14010272>
- Urmi, T. A., Rahman, M. M., Islam, M. M., Islam, M. A., Jahan, N. A., Mia, M. A. B., Akhter, S., Siddiqui, M. H., & Kalaji, H. M. (2022). Integrated Nutrient Management for Rice Yield, Soil Fertility, and Carbon Sequestration. *Plants*, 11, 138. <https://doi.org/10.3390/plants11010138>
- Haque, F., Alam, M. A., Rahman, M. M., Morshed, M., Biswas, J. C., Akhter, S., & Haque, M. M. (2022) Effect of Elevated CO<sub>2</sub> on Nutrient Dynamics in Soil and Nutrient Uptake by Rice in an Open Top Chamber. *Journal of Agricultural Innovation and Development*, 1(1).
- Rimmi, S. N., Islam, M. S., Alam, M. S., Khan, M. A. R., & Binte, B. I. (2022). Yield Response of Maize to Irrigation and Nitrogen Fertilization. *Agricultural Science Digest*, 10.18805/ag.DF-493. 1-6.

#### **b) Book/Book Chapter**

- Rahman, M. M., Alam, M. S., Kamal, M. Z. U., Rahman, G. K. M. M., Islam, M. M., Haque, M. M., Miah, M. G., & Biswas, J. C. (2022). Potential of legume-based cropping systems for climate change adaptation and mitigation. In: Meena, R.S. and Sihag, S.K. (Eds.), *Advances in Legumes for Sustainable Intensification*, 381-402. <https://doi.org/10.1016/B978-0-323-85797-0.00030-6>
- Kabir M. H., Brodie G., Gupta D., & Pang, A. (2022). Microwave Soil Treatment Alleviates Arsenic Phytotoxicity and Reduces Wheat Grain Arsenic Concentration. *IntechOpen Book: Wheat* (Working title).

**Postgraduate Student's Information**

Program	Number
MS	23
PhD	06
Total =	29

**Courses Offered by the Department at Undergraduate Level**

Term	Course Code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	SSC 225	Soil Survey, Classification and Conservation	II	3.0	Dr. Md. Mizanur Rahman Mahmuda Akter
	SSC 401	Soil Survey, Classification and Conservation	IV	4.5	Dr. Md. Mizanur Rahman Bushra Islam Binte Md. Ashraful Alam
	SSC 101	Introductory Soil Science	I	3.0	Dr. GKM Mustafizur Rahman Dr. Md Humayun kabir
Autumn	SSC 355	Soil Fertility and Management	III	4.5	Dr. Md. Shafiqul Islam Dr. Mohammad Saiful Alam
	SSC 440	Agriculture and Agro Industrial Chemistry	IV	4.5	Dr. Md. Yunus Miah Dr. Mohammed Zia Uddin Kamal
Winter	SSC 365	Soil Microbiology	III	4.5	Dr. Mohammad Saiful Alam Mariam Khanam

**Courses Offered by the Department at Postgraduate Level**

Term	Course Code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	SSC 501	Soil Chemistry	MS	3.0	Dr. GKM Mustafizur Rahman Dr. Md Humayun Kabir
	SSC 514	Soil-Plant Analysis	MS	3.0	Dr. Mohammad Saiful Alam Dr. Mohammed Zia Uddin Kamal Dr. Md Humayun Kabir
Autumn	SSC 523	Soil Microbiology	MS	3.0	Dr. Mohammad Saiful Alam
	SSC 538	Soil Fertility	MS	3.0	Dr. Md. Mizanur Rahman
	SSC 542	Environment and Soil Pollution	MS	3.0	Dr. G. K. M. Mustafizur Rahman Dr. Md. Humayun Kabir
Winter	SSC 638	Advanced Soil Fertility	PhD	3.0	Dr. Md. Mizanur Rahman
	SSC 512	Soil Physics	MS	3.0	Dr. Mohammed Zia Uddin Kamal
	SSC 623	Advanced Soil Microbiology	PhD	3.0	Dr. Mohammad Saiful Alam





## Seed Science & Technology Unit

[www.bsmrau.edu.bd/sst/](http://www.bsmrau.edu.bd/sst/)

### Faculty Members

Prof. Dr. Abdul Karim, Dept. of Agronomy

Prof. Dr. M. Moynul Haque, Dept. of Agronomy

Prof. Dr. Md. Golam Rasul, Dept. of Genetics and Plant Breeding

Prof. Dr. Md. Abu Ashraf Khan, Dept. of Plant Pathology

Prof. Dr. A.K.M. Aminul Islam, Dept. of Genetics and Plant Breeding

Prof. Dr. Md Azizul Hoque, Coordinator, Seed Science & Technology Unit

### Officers and Staff

Name	Designation
Atia Yasmin	Lab Attendant

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the courses	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GPB/SST 527	Plant Breeding	MS & PhD	3.0	Dr. Md.Golam Rasul Dr. M. Mehfuz Hasan Saikat
	SST/PLP 506	Seed Pathology	MS & PhD	3.0	Dr. Md. Abu Ashraf Khan Md. Abdul Kader
	GPB/SST 655	Heterosis Breeding and Hybrid Seed Technology	MS & PhD	3.0	Dr. Nasrin Akter Ivy
Autumn	GPB/SST 665	Maintenance Breeding and Breeder seed production	MS & PhD	3.0	Dr. Md. Golam Rasul
	SST 655	Heterosis Breeding and Hybrid Seed Technology	MS & PhD	3.0	Prof. Dr. Nasrin Akter Ivy
Winter	GPB/SST 615	Plant Genetic Resources	MS & PhD	3.0	Prof. Dr. Nasrin Akter Ivy



## Faculty of Fisheries

- Department of Aquaculture
- Department of Fisheries Biology and Aquatic Environment
- Department of Fisheries Management
- Department of Fisheries Technology
- Department of Genetics and Fish Breeding





## Faculty of Fisheries

### Dean

Prof. Dr. S. M. Rafiquzzaman, (1 June, 2022 to date)

### Officers and Staff

Name	Designation
Alish Akhter Shahnaj Parvin	Section Officer
Md. Mokhlesur Rahman	PA to Dean
Md. Mahbubur Rahman Sikder	Senior Assistant
Mst. Reshma Khatun	UDA
Md. Shovo Miah	Hatchery Attendant
Md. Aatur Rahman	MLSS

### Admission Statistics of BS (Fisheries) Student for 2022

Term	Summer Term 2022	Remarks
No. of student admitted	60	
No. of student admitted from merit list	60	
No. of student admitted from FF Quota	3	
No. of student admitted from Tribal Quota	2	
No. of student admitted from waiting list	--	
Minimum GPA of the admitted student	09	
Maximum GPA of admitted student	10	

### Year and term-wise student's enrollment, exams held, results published and students passed in BS programs in 2022

#### BS (1<sup>st</sup> Year)

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	60	29.01.2023			
Autumn					
Winter					

#### BS (2<sup>nd</sup> Year)

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	49	29.01.2023			
Autumn					
Winter					

**BS (3<sup>rd</sup> Year)**

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	50	29.01.2023			
Autumn					
Winter					

**BS (4<sup>th</sup> Year)**

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	57	29.01.2023			
Autumn					
Winter					

**Credit Distribution for BS (Fisheries) Program****1<sup>st</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
AQC 101	2.0+1.0	AQC 135	3.0+1.0	FMG 165	3.0+1.0
FBE 105	3.0+1.0	FMG 135	2.0+1.0	FBE 165	3.0+1.0
FMG 110	2.0+1.0	FBE 140	2.0+1.0	GFB 175	2.0+1.0
GEU 101	2.0+0.0	CST 131	2.0+1.0	FIT 163	3.0+1.0

Total Credit hrs for 1<sup>st</sup> Year = 42 (31.0+11.0)**2<sup>nd</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
FMG 215	2.0+1.0	AQC 238	2.0+1.0	FBE 262	3.0+1.0
FBE 211	2.0+1.0	FIT 235	3.0+1.0	FMG 270	3.0+1.0
FIT 204	2.0+1.0	FBE 235	3.0+1.0	BMB 261	3.0+0.0
STT 201	3.0+1.0	FMG 240	3.0+1.0	AQC 265	3.0+1.0
BMB 201	2.0+1.0	AEC 231	3.0+0.0	GFB 268	3.0+1.0

Total Credit hrs for 2<sup>nd</sup> Year = 53.0 (40.0+13.0)**3<sup>rd</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
AQC 305	3.0+1.0	GFB 335	3.0+1.0	AQC 365	3.0+1.0
FBE 325	3.0+1.0	FIT 338	3.0+1.0	AQC 368	3.0+1.0
FIT 307	3.0+1.0	AQC 336	3.0+1.0	AER 361	2.0+0.0
GFB 318	3.0+1.0	FBE 335	3.0+1.0	FIT 369	2.0+1.0
GFB 326	3.0+1.0	FMG 345	3.0+1.0	FMG 375	3.0+1.0

Total Credit hrs for 3<sup>rd</sup> Year = 57.0 (43.0+14.0)



#### 4<sup>th</sup> Year

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
AQC 408	3.0+1.0	AQC 435	2.0+1.0	Internship	9
FIT 410	3.0+1.0	FIT 441	3.0+1.0		
FMG 425	3.0+1.0	FMG 450	3.0+1.0		
FBE 415	2.0+1.0	AER 432	3.0+1.0		
GEU 401	2.0+0.0	GFB 450	3.0+1.0		

Total Credit hrs for 4<sup>th</sup> Year =45.0 (27.0+9.0+9.0)

Total Number of Courses = 53, Total Cr. Hr. = 197 (Theory 141, Practical 47, Internship 9)

#### Other's Information (if any):

##### Academic Activities

##### 1. Admission

Students for BS (Fisheries) Programme are admitted in the summer terms (once in a year). Summer term generally starts from March.

##### 2. Enrollment

Students selected for admission shall enroll courses in each term. Dean Office prepare the enrollment list and supervise the enrollment of students. Continuing students shall enroll courses during the 10<sup>th</sup> and 11<sup>th</sup> week of the current term after paying regular fees.

##### 3. Scholarship Distribution

BSMRAU provided financial assistance to a good number students in each term. Applications for scholarship were primarily scrutinized and list of eligible candidates were prepared by the Dean Office.

##### 4. Examination

- Dean Office prepared examination schedules for BS Programme according to academic calendar.
- Conducted mid-term and final examination. Collected grade report on the schedule time and sent it to the additional controller of the examination.
- After prepared the results, arrangement was made for publishing.

##### 5. Other Activities

- Courses offering plan and class routine preparation, class room management, management of audio visual teaching aids (OHP, MMP, etc.)
- Nomination/selection of candidates for scholarships offered by various organizations (UGC, Sena Kallyan Songhstha, Dutch Bangla Bank Foundation, etc.).
- Issue various certificates to the enrolled and outgoing students.
- Organize faculty meetings and execute recommendations decisions of the faculty meetings.



## Department of Aquaculture

www.bsmrau.edu.bd/aqc/

### Faculty Members

#### Professor

Prof. Dr. Md. Amzad Hossain

#### Associate Professor

Taslima Akter

#### Assistant Professor

Mousumi Das

A.Q.M. Robiul Kawser

Md. Rabiul Islam

Dr. Umme Kaniz Fatema

### Officers and Staff

Name	Designation
Faruq Ahmed	Technical Officer
Selim Mahmud Hasan	Office Assistant Cum-Computer Operator
Md. Mahamudul Hasan	MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Mahmuda Akter Bithy (16-05-3933)	“Effects of Dietary Freshwater Algal Supplementation on Growth, Coloration, and Stress Tolerance of Goldfish ( <i>Carassius auratus</i> )	Taslima Akter	Aut/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Md. Amzad Hossain Co-PI: Taslima Akter	Development of Mass Culture Technology of <i>Spirulina platensis</i> Based on Low-cost Media and its Application in Rearing Fish Larvae	RMW, BSMRAU BDT 8.30 Lac	2022
PI: Taslima Akter	Effect of dietary <i>Chlorella ellipsoidea</i> supplementation on growth, body composition, and immunological parameter of climbing perch ( <i>Anabas testudineus</i> )	BSMRAU Innovation Fund BDT 1.0 Lac	2022
PI: Dr. Md. Amzad Hossain Co-PI: Mousumi Das	Use of Microalgae as Feed Additives for Enhanced Growth and Immune Response of High Valued Fishes	BAS-USDA BDT 27.178 Lac	2020



Co-PI: Mousumi Das	Effects of Dietary probiotic yeast and medicinal spices on growth performance, feed utilization and disease resistance in freshwater catfish Gulsha ( <i>Mystus cavasius</i> )	MoST, GoB Tk. 3 Lac.	2022
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### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Umme Kaniz Fatema	Sustainability Assessment of Marine Aquaculture Farms in Different Prefectures in Japan	Joint Research Promotion Program, YNU, Japan 3,00,000 JPY	2022
PI: Dr. Md. Amzad Hossain	Effect of carbon-nitrogen ratio manipulation on the growth performance, body composition and immunity of stinging catfish <i>Heteropneustes fossilis</i> in a biofloc based culture system	UGC Tk. 3.00 Lac	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Amzad Hossain	Workshop on “Regional workshop on selection of priority areas for fisheries subsector of agricultural research”	9 November 2022	Bangladesh	Participant
Taslima Akter	NATP			
Taslima Akter	Workshop for opening the MS & Ph. D. degrees at the Departmental of Agro-processing.	29 September 2022	Bangladesh	Participant
Taslima Akter	Workshop for opening the Ph. D. program on “Environmental Sciences”	25 September 2022	Bangladesh	Participant
Dr. Md. Amzad Hossain	“Expert’s Consultation workshop on the Curriculum of BS Program for faculty of Forestry and Environment”	22 September 2022	Bangladesh	Participant
Dr. Md. Amzad Hossain Taslima Akter Mousumi Das	Proposal Presentation Workshop on RMC-UGC funded Long Term Research Project (2022-2025)	1 September 2022	Bangladesh	Participant
Taslima Akter Mousumi Das	Review Workshop on RMC-UGC funded long term Research Project (2018-2021)	25 August 2022	Bangladesh	Participant
Taslima Akter Mousumi Das	Workshop on “Challenges of bio floc technology in Bangladesh Aquaculture: An ambiguous media hype.”	28 March 2022	Bangladesh	Participant

**Administrative Duties by the Departmental Members (if any with tenure)**

Name	Position & Address	Duration
Taslina Akter	Head Department of Aquaculture	05 May, 2021 to till date
Mousumi Das	Assistant Provost, Ila Mitra Ladis Hall	12, January, 2022 to date

**List of Publication by the Members of the Department****a) Journal**

- Akter, T., Hasan, M. M., Das, M., Mondal M. N., Hossain, S., Munir, M. B., & Hossain, M. A. (2022). Utilization of fermented wheat bran extract medium as a potential low-cost culture medium for *Chlorella ellipsoidea*. *Borneo Journal of Resource Science and Technology*, 12(2), 63-73.
- Fatema, U. K., Faruque, H., Salam, M. A., & Matsuda, H. (2022). Vulnerability Assessment of Target Shrimps and Bycatch Species from Industrial Shrimp Trawl Fishery in the Bay of Bengal, Bangladesh. *Sustainability*, 14(3), 1691.
- Hossain, M. A., Ashraful, Akter, T., Sadia, M. A., Akter, T., & Habib, K. A. (2022). Optimization of Planting Density of Indian Spinach in a Recirculating Aquaponics System Using Nile Tilapia: Planting of Indian Spinach in an Aquaponics System. *Biological Sciences-PJSIR*, 65(1), 18-27.
- Hossain, M. A., Ashraful, Akter, T., Sadia, M. A., Akter, T., & Habib, K. A. (2022). Optimization of Planting Density of Indian Spinach in a Recirculating Aquaponics System Using Nile Tilapia: Planting of Indian Spinach in an Aquaponics System. *Biological Sciences-PJSIR*, 65(1), 18-27.
- Hossain, M. A., Hossain, I., Saha, J., Akter, T., Islam, M. R., Rahman, M. M., & Banu, M.R. (2022). A comparison of artificial and natural diets for growth and survival of stinging catfish *Heteropneustes fossilis* larvae. *Egyptian Journal of aquatic biology and fisheries*, 26(6): 1055-1067.
- Kole, K., Islam, M. R., Mrong, C. E., Neepa, N. N., Sultana, N., Haque, M. R., Salam, S., & Mostakim, G. M. (2022). Toxicological effect of sumithion pesticide on the hematological parameters and its recovery pattern using probiotic in *Barbonymus gonionotus*. *Toxicology Reports*, 9, 230-237.
- Moniruzzaman, M. & Fatema, U. K. (2022). Proximate analysis of local ingredients as a prospective resource for feed production in Bangladesh. *Journal of Multidisciplinary Sciences*, 4(1), 1-9.
- Rasul, M. G., Faruk, M. O., Sarkar, M. S. I., Yuan, C., Akter, T., & Shah, A. K. M. (2022). Post-mortem Biochemical, microbiological and sensory quality changes in the Grass crap (*Ctenopharyngodon Idella*) during Ice Storage. *Egyptian Journal of Aquatic Biology and Fisheries*, 26(5), 175-187.
- Rasul, M. G., Faruk, M. O., Sarkar, M. S. I., Yuan, C., Akter, T., & Shah, A. K. M. (2022). Post-mortem Biochemical, microbiological and sensory quality changes in the Grass crap (*Ctenopharyngodon Idella*) during Ice Storage. *Egyptian Journal of Aquatic Biology and Fisheries*, 26(5), 175-187.
- Saha, J., Hossain, M. A., Al-Mamun, M., Islam, M. R., & Alam, M. S. (2022). Effects of carbon-nitrogen ratio manipulation on the growth performance, body composition and immunity of stinging catfish *Heteropneustes fossilis* in a biofloc-based culture system. *Aquaculture Reports*, 25, 101274.

**Conference paper**

- Mamun, M. A., Hossain, M. A., Saha, J., Khan, S., Akter, T. and Banu, M. R. Effect of *Spirulina platensis* meal as a feed additive for growth and immune response of gulsa (*Mystus cavasius*). Book of abstract, 9<sup>th</sup> Biennial Fisheries conference & Fair, 2022, Dhaka, Bangladesh, p-52.
- Zahan, N. Hossain, M. A., Saha, J., Akter, T and Haque, F. Suitability of *Spirulina platensis* as a feed additive on growth performance, body composition, hematology and immune response of stinging catfish (*Heteropneustes fossilis*). Book of abstract, 9<sup>th</sup> Biennial Fisheries conference & Fair, 2022, Dhaka, Bangladesh, p-68.





### b) Book/Book Chapter

Kawser, A. R., Islam, T., Alam, M. S., Rahman, M. M., & Salam, M. A. (2022). Mechanisms of the beneficial effects of probiotic *Bacillus* spp. in aquaculture. In *Bacilli in Agrobiotechnology: Plant Stress Tolerance, Bioremediation, and Bioprospecting* (pp. 453-486). Cham: Springer International Publishing.

### Postgraduate Student's Information

Program	Number
MS	01
PhD	-
Total =	01

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AQC 101	Principals of Aquaculture	I	3	Mousumi Das Dr. Md. Amzad Hossain
	AQC 301	Fundamentals of Fish Nutrition	III	3	Dr. Md. Amzad Hossain Taslina Akter
	AQC 401	Ornamental Fish Culture	IV	3	Taslina Akter Mousumi Das
Autumn	AQC 131	Freshwater Aquaculture	I	3	Dr. Md. Amzad Hossain
	AQC 231	Ornamental Fish Culture	II	3	Taslina Akter
	AQC 331	Fish nutrition in Aquaculture	III	3	Dr. Amzad Hossain Mousumi Das
	AQC 431	Fish Feed Technology	IV	3	Taslina Akter Mousumi Das
Winter	AQC 261	Coastal Aquaculture & Mariculture	II	3	Mousumi Das Dr. Umme Kaniz Fatema
	AQC 361	Live Food Culture	III	3	Dr. Md. Amzad Hossain Taslina Akter
	AQC 362	Aquaculture Engineering	III	3	Taslina Akter Mousumi Das

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AQC 562	Sustainable Aquaculture	MS		Dr. Md. Amzad Hossain
	AQC 501	Open water Aquaculture	MS	3.0	Dr. Md. Amzad Hossain
	AQC 531	Fish Nutrition and Feed Technology	MS	3.0	Dr. Md. Amzad Hossain
Autumn	AQC 540	Live Food Culture	MS	3.0	Dr. Md. Amzad Hossain
	AQC 505	Shellfish Culture	MS	3.0	Mousumi Das
Winter	AQC 561	Integrated Aquafarming	MS	3.0	Taslina Akter



## Department of Fisheries Biology and Aquatic Environment

[www.bsmrau.edu.bd/fbe/](http://www.bsmrau.edu.bd/fbe/)

### Faculty Members

#### Professor

Dr. Nargis Sultana  
Dr. S. M. Rafiquzzaman

#### Associate Professor

Dr. Md. Shakhawate Hossain  
Animesh Roy

#### Assistant Professor

Ibrahim Rashid (Study leave)

### Officers and Staff

Name	Designation
Md. Aminur Rahman Khan	Administrative Officer
Faysal Mahamud	Assistant Technical Officer
Soniya Akter	Lab. Attendant

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Fahmida Aktar (2016-05-3913)	Proximate Composition, Active Compounds, Antioxidant Activity and Anti-nutritional factors of fermented and Non-fermented Maize	Dr. S.M. Rafiquzzaman	Aut/22
Dipak Roy (16-05-3923)	Fucoidan from Sargassum sp.: Optimization of Extraction Methods and it's Compositional and Functional Characterization	Dr. S.M. Rafiquzzaman	Aut/22
HIMA AKTER (2016-05-3920)	Evaluation of Proximate Composition, Active Compounds, Antioxidant Activity and Antinutritional Factors of Fermented and Nonfermented Wheat Bran	Dr. S.M. Rafiquzzaman	Aut/22
Md. Habibur Rahman (2016-05-3958)	Isolation, Screening and Production of Protease Enzyme From Bacteria Collected From Soil And Water of Cox's Bazar	Dr. S.M. Rafiquzzaman	Sum/22
Mt. Sumaya Khatun (2016-05-3958)	Prevalence of Antibiotic Resistant Bacteria in Different Wastewater of Gazipur District, Bangladesh	Dr. Md. Shakhawate Hossain	Aut/22
Md. Asif Alam Wahra (2016-05-3958)	Occurrence of Heavy Metal and Metal Resistant Bacteria in an Urban River Water Contaminated by Municipal and Industrial Wastes	Dr. Md. Shakhawate Hossain	Sum/22



### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. S.M. Rafiquzzaman	Adaptation of aquamimicry technology as nature-positive solution for improved nursing and sustainable shrimp farming in different coastal areas of Bangladesh.	SCMFP, DoF BDT 80.90 Lac	June'2022
Dr. Md. Shakhawate Hossain	Screening of antimicrobial substances and antibiotic resistant genes (ARG) in the fish culture system of Bangladesh: state of antimicrobial resistance (AMR)	MoE, GoB BDT 20.0 Lac	July'2021
Dr. Md. Shakhawate Hossain	Analysis of extended spectrum $\beta$ -lactamases producing coliform bacteria and prevalence of antibiotic resistant genes in culture and capture fish and water	RMW, BSMRAU BDT 11.0 Lac	July'2021
Dr. Animesh Roy	Determination of genetic diversity and population genetic structure of <i>Cirrhinus reba</i> based on mtDNA control region	RMW, BSMRAU BDT 9.0 Lac	July'2022
Dr. Md. Shakhawate Hossain	Identification of metal resistant bacteria from an urban river influenced by municipal and industrial wastes: Bioremediation viewpoint	MoST, GoB BDT 4.5 Lac	July'2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget (lac)	Completion Year
Dr. S.M. Rafiquzzaman	“Exploration of exogenous enzymes, bivalent efficacy and Omega-3 fatty acid of microbes and small invertebrates as potential feed supplement for enhancing fish and shrimp productivity”	NATP-II, BARC BDT 107.17	June'2022
Dr. S.M. Rafiquzzaman	Analysis of Bioactive Compounds with its Antioxidant Activities of Crude Extracts of <i>Sargassum</i> sp.	BFRI Budget: 6.00	June'2022
Dr. Md. Shakhawate Hossain	Evaluation of microbial composition and heavy metal contamination in an urban river influenced by municipal and industrial wastes	MoST, GoB BDT 2.0	June'2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Shakhawate Hossain	23rd Symposium of the International Association of Astacology	20 - 26 June 2022	Czech Republic	Poster Presenter

**Administrative Duties by the Departmental Members (if any with tenure)**

Name	Position & Address	Duration
Prof. Dr. S.M. Rafiquzzaman	Dean, Faculty of Fisheries	01 June 2022 to 31 May2024
Dr. Md. Shakhawate Hossain	Head, Dept. of FBE	24 February 2022 to 23 February 2024
	Assistant Provost, STA Hall	11 February 2021 to 10 February 2023

**List of Publication by the Members of the Department****a) Journal**

- Bokhtair, S. M., Ali, M. A., Chowdhury, M. A. Z., Ahmed, K. U., Hassan, M. K., Ahmed, M., Bhuiyan, M. S., Mashuk, O. F., Rahman, M. M., Rafiquzzaman, S. M., & Hossain, M. F. (2022). Yield Improvement of *Gracilaria tenuistipitata* by Optimizing Different aspects in Coast of Cox's Bazar, Bangladesh. *Scientific Reports*, 12, 4174. <https://doi.org/10.1038/s41598-022-08040-3>.
- Hossain, M. K., Islam M. M., Rafiquzzaman S. M., Nuruzzaman, M., Hossain, M. T., & Shahjahan, M. (2022). Multi-species probiotics enhance growth of Nile tilapia (*Oreochromis niloticus*) through upgrading gut, liver and muscle health. *Aquaculture Research*. doi: 10.1111/are.16052
- Rahman, M. L., Dipu, S. Y., Haque, F., Rafiquzzaman S. M., & Alam, M. S. (2022). Evaluation of breeding and growth performances of crossbreds and backcrossbredswith purebreds of Bangladeshi and Vietnamese climbing perch (*Anabas testudineus*). *Aquaculture Fish and Fisheries*, doi: 10.1002/aff2.70.
- Siddique, M. A. M., Hossain, M. S., Islam, M. M., Rahman, M., & Kibria, G. (2022). Heavy metals and metalloids in edible seaweeds of Saint Martin's Island, Bay of Bengal, and their potential health risks. *Marine Pollution Bulletin*, 181, 113866.
- Sultana, R., Shemu, S., Ali, A., Ahiduzzaman, Rahman, M., Rafiquzzaman, S. M., & Haque, M. A. (2022). Burmese Grape is an Underexploited Fruit Crop Potential to Use in Phytonutrient Enriched Yogurt Formulation. *European Journal of Applied Sciences*, 10(1), 525-543.

**Postgraduate Student's Information**

Program	Number
MS	06
PhD	-
Total =	06

**Courses Offered by the Department at Undergraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	FBE 101	Fisheries Zoology	I	3.0+1.0	Dr. Animesh Roy Dr. Nargis Sultana
	FBE 201	Fisheries Systematics	II	2.0 + 1.0	Dr. Animesh Roy Dr. S.M. Rafiquzzaman
	FBE 301	Fish Reproductive Physiology	III	3.0 + 1.0	Dr. Md. Shakhawate Hossain Dr. S.M. Rafiquzzaman
	FBE 401	Aquatic Environment and Pollution	IV	2.0 + 1.0	Dr. Md. Shakhawate Hossain Dr. S.M. Rafiquzzaman



	FBE 131	Fisheries Biodiversity	I	2.0 + 1.0	Dr. Animesh Roy Dr. S.M. Rafiquzzaman
Autumn	FBE 231	Fundamentals of Fish Physiology	II	3.0 + 1.0	Dr. Md. Shakhawate Hossain Dr. Nargis Sultana
	FBE 331	Biology of Farmed Shellfish	III		Dr. Animesh Roy Dr. S. M. Rafiquzzaman
	FBE 161	Ichthyology	I	3.0 + 1.0	Dr. Animesh Roy Dr. Nargis Sultana
Winter	FBE 261	Biology of Farmed Fishes	II	3.0 + 1.0	Dr. Md. Shakhawate Hossain Dr. Nargis Sultana

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	FBE 501	Biology of Finfish and Shell Fish	MS	3.0	Dr. Animesh Roy
	FBE 530	Aquatic Animal Physiology and Reproduction	MS	3.0	Dr. Md. Shakhawate Hossain
	FBE 532	Integrative Environmental Physiology	MS	3.0	Dr. Nargis Sultana
	FBE 511	Applied Conservation Biology	MS	3.0	Dr. S.M. Rafiquzzaman
Autumn	FBE 507	Aquatic Animal Behaviour	MS	3.0	Dr. S.M. Rafiquzzaman
	FBE 510	Fish Biodiversity and Aquatic Environment	MS	3.0	Dr. Animesh Roy
	FBE 531	Endocrinology of Aquatic Animals	MS	3.0	Dr. Md. Shakhawate Hossain
		Embryology of Fishes	MS	3.0	Dr. Nargis Sultana
Winter	FBE 502	Biology of Non-piscine Aquatic Vertebrates	MS	3.0	Dr. Nargis Sultana
	FBE 540	Ichthyology	MS	3.0	Dr. Animesh Roy
	FBE 550	Aquatic Pollution and Toxicology	MS	3.0	Dr. S.M. Rafiquzzaman
	FBE 551	Molecular Toxicology	MS	3.0	Dr. S.M. Rafiquzzaman



## Department of Fisheries Management

[www.bsmrau.edu.bd/fmg/](http://www.bsmrau.edu.bd/fmg/)

### Faculty Members

#### Associate Professor

Dr. Farhana Haque  
Dr. Dinesh Chandra Shaha  
Dr. Tasmina Akter  
Dr. Md. Nurunnabi Mondal  
Md. Emranul Ahsan

#### Assistant Professor

Dr. Mst. Rubia Banu

### Officers and Staff

Name	Designation
Md. Maraj Hossain Siddiki	Office Assistant Cum Computer Operator
Md. Deluar Hossain Akanda	Lab. Technician
Sumaya Rahaman	Lab. Attendant

### MS Thesis

Name & Reg. No. of the Student	Title of the Thesis	Major Professor	Term of Graduation
Rabina Akther Lima (2015-05-3577)	Seasonal variation of plankton community structure in the Sundarban Mangrove waters	Dr. Dinesh Chandra Shaha	Aut/21
Salman Ahmed (2019-05-5307)	Fish diversity in relation to salinity gradient in the coastal region of Bangladesh	Dr. Dinesh Chandra Shaha	Win/21
Afia Anjum (2015-05-3626)	Identification of areas with suitable water quality parameters for mariculture around the Hatya Island	Dr. Dinesh Chandra Shaha	Win/21
Zibon Naher Yasmin (2015-05-3627)	Identification of areas with suitable water quality parameter for mariculture in the Meghna River estuary.	Dr. Dinesh Chandra Shaha	Win/21
Rifat Azad Keya (2015-05-3614)	Assessment of heavy metals and ecological risk of commercial Pangas (Pangasianodon hypophthalmus) and Tilapia (Oreochromis niloticus) Aquaculture farm in Bangladesh	Md. Emranul Ahsan	Win/21
Swapna Akter (2015-05-3591)	Fish Species availability and fishing gears used in Kohelia Channel, Moheshkhali, Cox's Bazar.	Md. Emranul Ahsan	Win/21

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Dinesh Chandra Shaha	Spawning and Nursery Habitat Assessment of hilsa shad in the Tetulia and Meghna River estuaries	RMW, BSMRAU BDT 320000.00	2021



Dr. Mst. Rubia Banu	Effects of Dietary probiotic yeast and medicinal species on growth performance, feed utilization and disease resistance in freshwater catfish Gulsa (Mystus Cavasius)	MoST, GoB BDT 250000.00	2022
Md. Emranul Ahsan	Impacts of Emerging Pollutants on Commercial Rohu (Labeo rohita) Aquaculture Systems in Bangladesh. Funded by Research Management Wing, BSMRAU	RMW, BSMRAU BDT 900000.00	2022
Md. Emranul Ahsan	Assessment of Heavy Metals in Rohu (Labeo rohita) commercial Aquaculture in Bangladesh and Associated Human Consumption Risk. Funded by the Ministry of Science and Technology, Bangladesh.	MoST, GoB BDT 200000.00	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. Dinesh Chandra Shaha	A study on export of saline water and nutrients from the Shibsa River estuary, Bangladesh (I-2-W-5414-2)	International Foundation for Science (IFS), Sweeden USD 12000.00	2022
Dr. Farhana Haque	Observation and modeling for identifying eggs and larval retention area of hilsa shad around the Hatiya Island	MoST BDT 250000.00	2022

### List of Seminar/Workshop/Training Attended (Local and Foreign)

Name	Program Attended	Date	Country	Role/Contribution in the program
Dr. Dinesh Chandra Shaha	Talk on “Fisheries Protection and Conservation Perspectives”	09 November 2022	Bangladesh	Presenter
Dr. Dinesh Chandra Shaha	Workshop for opening the MS & Ph. D. degrees at the Departmental of Agro-processing.	29 September 2022	Bangladesh	Participant
Dr. Dinesh Chandra Shaha	Workshop for opening the Ph. D. program on “Environmental Sciences”	25 September 2022	Bangladesh	Participant
Dr. Dinesh Chandra Shaha	“Expert’s Consultation workshop on the Curriculum of BS Program for faculty of Forestry and Environment”	22 September 2022	Bangladesh	Participant
Dr. Dinesh Chandra Shaha	Proposal Presentation Workshop on RMC-UGC funded Long Term Research Project (2022-2025)	1 September 2022	Bangladesh	Participant
Dr. Dinesh Chandra Shaha	Review Workshop on RMC-UGC funded long term Research Project (2018-2021)	25 August 2022	Bangladesh	Presenter



Dr. Dinesh Chandra Shaha	Policy Dialogue on Revision of National Fisheries Policy 1998	21 August 2022	Bangladesh	Participant
Dr. Dinesh Chandra Shaha	In-House Workshop to review and provide input on draft NAP	19-21 April 2022	Bangladesh	Participant
Dr. Dinesh Chandra Shaha	Workshop on “Challenges of bio floc technology in Bangladesh Aquaculture: An ambiguous media hype” (Project Code No. LSG-3F/21.) funded by KGF	28 March 2022	Bangladesh	Participant
Dr. Dinesh Chandra Shaha	Training Workshop on “Lab Management of BSMRAU”	27 February 2022	Bangladesh	Resource Person
Md. Emranul Ahsan	Review Workshop on RMC-UGC funded long term Research Project (2018-2021)	25 August 2022	Bangladesh	Participant
Dr. Mst. Rubia Banu	Training on National Integrity Strategy	24 October 2022	Bangladesh	Participant
Dr. Mst. Rubia Banu	Statistics Analysis	27-28 November 2022	Bangladesh	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Tasmina Akter	Head, Department of Fisheries Management Assistant Provost, Bangamata Sheikh Fazilatunnesa Mujib Hall	17 July 2022 to till date May, 2021 to till date
Dr. Farhana Haque	Provost, Bangamata Sheikh Fazilatunnesa Mujib Hall	19 July 2020 to till date
Dr. Dinesh Chandra Shaha	Provost, Shaheed Tajuddin Ahmad Hall	08 July 2021 to till date

### List of Publication by the Members of the Department

#### a) Journal

- Ahsan, M. E., Islam S. R., Razzak, M. R., Ali, M. L., & Haque, M. M. (2022). Assessment of heavy metals from pangasius and tilapia aquaculture in Bangladesh and human consumption risk. *Aquaculture International*, 30, 1407–1434. <https://doi.org/10.1007/s10499-022-00903-w>
- Ahsan, M. E., Lassen, S. B., Islama, S. R., Zhou, X.Y., Razzak, S. R., Su, J.Q., & Brandt. K. K., (2022). Prevalence of antibiotic resistance genes in *Pangasianodon hypophthalmus* and *Oreochromis niloticus* aquaculture production systems in Bangladesh. *Science of the Total Environment*, 813, 151915. <http://dx.doi.org/10.1016/j.scitotenv.2021.151915>.
- Akter, T., Ehsan, R., Paul, S. I., Ador, M.A.A., Rahman, A., Haque, M. N., Islam M. T., & Rahman M. M., (2022). Development of formalin killed vaccine candidate against streptococcosis caused by *Enterococcus* sp. in Nile tilapia. <https://doi.org/10.1016/j.aqrep.2022.101371>
- Hasan, J., Shaha, D. C., Ahmed, M., Haque, S. M., Haque, F., Ahsan, M. E. Ahmed, S., Hossain, M. I., & Salam, M. A. (2022). Outwelling of nutrients into the Pasur River Estuary from the Sundarbans mangrove creeks. *Heliyon*, 12270. <https://doi.org/10.1016/j.heliyon.2022.e12270>
- Hasan, J., Shaha, D. C., Kundu, S. R., Yusoff, F. M., Cho, Y. K., Haque, F.; Salam, M.A., Ahmed, S., Wahab, M. A., & Ahmed, M. et al. (2022). Phytoplankton Community in Relation to Environmental Variables in the Tidal Mangrove Creeks of the Pasur River Estuary, Bangladesh. *Conservation*, 2, 587-612. <https://doi.org/10.3390/conservation2040039>





- Hossain, M. A., Ashraful, T. Akhter, Sadia, M. A., Akter, T., & Habib, K. A. (2022). Optimization of Planting Density of Indian Spinach in a Recirculating Aquaponics System Using Nile Tilapia. *Pakistan Journal of Scientific and Industrial Research Series B: Biological Sciences*, 65(1), 18-27. <https://doi.org/10.52763/PJSIR.BIOL.SCI.65.1.2022.18.27>
- Hossain, M. A., Hossain, M. I., Saha, J., Akter, T., Islam, M. R., Rahman, M. M., & Banu, R. (2022). A comparison of Artificial and Natural Diets for growth and survival of Stinging catfish *Heteropneustes fossilis* larvae. *Egypt J. Aqua Bio Fish*, 26(6), 1055-1067.
- Islam, N., Shaha, D. C., Hasan, J., Asad, M. H. A., Salam, M. A., Khan, M., Kundu, S. R., & Ahmed, M. (2022). Heavy Metal Pollution Reduced the Potentiality of Pen Culture in the Wetland Aquaculture in an Urban Area of Bangladesh. *Conservation*, 2(1), 68-79, <https://doi.org/10.3390/conservation2010006>
- Shaha, D. C., Asad, M. H. A., Hasan, J., Islam, N., Haque, F., & Mazumder, S. K. (2022). Effects of Napier Grass (*Pennisetum purpureum*) on Organic Carp Fish Production. *Egyptian Journal of Aquatic Biology and Fisheries*, 26(4), 705-725.
- Shaha, D. C., Cho, Y. K., Kundu, S. R., Hasan, J., Haque, F., & Salam, M. A. (2022). The calculation of flushing time for the upper Pasur River Estuary, Bangladesh. *Terrestrial, Atmospheric and Oceanic Sciences*, 33(1), 1-15, <https://doi.org/10.1007/s44195-022-00015-1>
- Shaha, D. C., Hasan, J., & Kundu, S.R. et al. (2022). Dominant phytoplankton groups as the major source of polyunsaturated fatty acids for hilsa (*Tenualosa ilisha*) in the Meghna estuary Bangladesh. *Sci Rep*, 12., 20980. <https://www.nature.com/articles/s41598-022-24500-2>
- Shaha, D. C., Hasan, J., Kundu, S. R., Haque, F., Rahman, M. J., Nahiduzzaman, M., & Wahab, M.A. 2022. Fish Diversity in Relation to Salinity Gradient in the Meghna River Estuary, Bangladesh. *Conservation*, 2(3), 414-434, <https://www.mdpi.com/2673-7159/2/3/28>
- Tora, A. T., Hasan, J., & Shaha, D. C. (2022). Marine fisheries resources in Bangladesh: present status and future prospects. *Ecol. J.*, 4 (2), 179-193.

### Postgraduate Student's Information

Program	Number
MS	06
PhD	-
Total =	06

### Courses Offered by the Department at Undergraduate Level

Term	Course Code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	FMG 215	Planktology	II	2+1	Dr. Mst. Rubia Banu Dr. Farhana Haque
	FMG 110	Freshwater Ecology	I	2+1	Dr. Dinesh Chandra Shaha Md. Emranul Ahsan
	FMG 401	Fish Population Dynamics	IV	3+1.5	Dr. Mst. Rubia Banu Dr. Md. Nurunnabi Mondal
	FMG 425	Oceanography & Marine Biology	IV	3+1.5	Dr. Dinsesh Chandra Shaha Dr. Md. Nurunnabi Mondal



Autumn	FMG 231	Fish Pathology	II	3+1	Dr. Md. Nurunnabi Mondal Dr. Tasmina Akther
	FMG 273	Elements of Fisheries	II	3+1.5	Md. Emranul Ahsan Dr. Md. Nurunnabi Mondal
	FMG 331	Fish Parasitology	III	3+1.5	Dr. Mst. Rubia Banu Dr. Tasmina Akther
	FMG 135	Estuarine and Marine Ecology	I	3+1.5	Dr. Dinsesh Chandra Shaha
Winter	FMG 161	Limnology	I	3+1	Dr. Mst. Rubia Banu Dr. Farhana Haque
	FMG 361	Prevention and Control of Fish Diseases	III	3+1.5	Md. Emranul Ahsan Dr. Tasmina Akther
	FMG 461	Fisheries Management & Conservations	IV	3+1.5	Dr. Dinsesh Chandra Shaha Md. Emranul Ahsan
	FMG 270	Fish Pathology	II	3+1.5	Md. Emranul Ahsan Dr. Tasmina Akther

### Courses Offered by the Department at Postgraduate Level

Term	Course Code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	FMG 560	Integrated Coastal Zone Management	MS	3.0	Dr. Dinesh Chandra Shaha Md. Emranul Ahsan
Autumn	FMG 501	Fisheries Resource Management	MS	3.0	Md. Emranul Ahsan
	FMG 564	Climate Change and Fisheries	MS	3.0	Dr. Md. Nurunnabi Mondal
Winter	FMG 532	Fish Health Management	MS	3.0	Md. Emranul Ahsan
	FMG 535	Fish Stock Assessment	MS	3.0	Dr. Md. Nurunnabi Mondal



## Department of Fisheries Technology

[www.bsmrau.edu.bd/fit/](http://www.bsmrau.edu.bd/fit/)

### Faculty Members

#### Professor

Dr. A. K. M. Azad Shah

#### Associate Professor

Dr. Murshida Khan

#### Assistant Professor

Dr. Md. Golam Rasul

Md. Shirajul Islam Sarkar

### Officers and Staff

Name	Designation
Afroza Lima	Technical officer
Most. Kamrunnahar Begum	Assistant Technical Officer
Md. Moklesur Rahman	MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Maisha Afrin (2016-05-3969)	Assessment of antioxidant and antimicrobial activities of ethanolic extracts of seaweeds collected from Saint Martin's Island	Dr. A. K. M. Azad Shah	Aut/22
Abida Khatun (2016-05-3914)	Impacts of Covid-19 on small scale fisheries in Bangladesh: market conditions and consumer behavior	Dr. A. K. M. Azad Shah	Aut/22
Ifrat Jahan Tannisa (2016-05-3944)	Assessment of antioxidant and antimicrobial activity of selected seaweeds from Cox's Bazar, Bangladesh	Dr. Md. Golam Rasul	Aut/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. A. K. M. Azad Shah Dr. Md. Golam Rasul	Antioxidant and antimicrobial potential of stevia ( <i>Stevia rebaudiana</i> Bertoni) leaf extracts and their application in fish preservation	RMW, BSMRAU BDT 1000000.00	July, 2021
Dr. A. K. M. Azad Shah Dr. Md. Golam Rasul	Effects of chitosan coating enriched with water lily extracts on the quality and shelf life of refrigerated bighead carp ( <i>Hypophthalmichthys nobilis</i> ) fillets	MoST, GoB BDT 200000.00	July, 2022



Dr. Md. Golam Rasul	Quality improvement and shelf life extension of Tilapia ( <i>Oreochromis niloticus</i> ) fish pickle using moringa leaves	RMW, BSMRAU BDT 100000.00	July, 2022
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### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. A. K. M. Azad Shah Dr. Md. Golam Rasul	Effects of guava leaf extracts on the quality and shelf life of refrigerated grass carp ( <i>Ctenopharyngodon idella</i> ) fillets	MoST, GoB BDT 200000.00	June, 2022
Dr. Md. Golam Rasul	Development of vacuum packaging with moringa extract for the storage of sun dried punti ( <i>Puntius sophore</i> )	RMW, BSMRAU BDT 100000.00	June, 2022
Md. Shirajul Islam Sarkar	Development of low-cost effective package for Hilsa ( <i>Tanualosa ilisha</i> )	RMW, BSMRAU BDT 100000.00	June, 2022
Md. Shirajul Islam Sarkar Prof. Dr. Habibur Rahman	Assessment of heavy metal pollution by industrial effluent discharge	MoE, GoB BDT 1500000.00	June, 2022
Md. Shirajul Islam Sarkar	Salted fish sold in local markets: How much nutritious and healthy for human consumption	MoST, GoB BDT 85000.00	June, 2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. A. K. M. Azad Shah	Challenges of biofloc technology in Bangladesh Aquaculture: An Ambiguous media hype	28 <sup>th</sup> March, 2022	Bangladesh	Participant
Dr. Md. Golam Rasul	International Conference on Aquaculture and Marine Biology	24-25 <sup>th</sup> March, 2022	India	Participant
Dr. Md. Golam Rasul	Challenges of biofloc technology in Bangladesh Aquaculture: An Ambiguous media hype	28 <sup>th</sup> March, 2022	Bangladesh	Participant
Dr. Md. Golam Rasul	Webinar on Food Frontiers in Health	22 <sup>nd</sup> September, 2022	China	Participant
Dr. Md. Golam Rasul	International Agriculture, Food, Environment and Biology Congress	7-9 <sup>th</sup> October, 2022	Turkey	Participant
Dr. Md. Golam Rasul	Statistical Data Analysis	27-27 <sup>th</sup> November, 2022	Bangladesh	Participant



Dr. Md. Golam Rasul	International Fisheries Symposium, 2022	5-7 <sup>th</sup> December, 2022	Vietnam	Presenter
Md. Shirajul Islam Sarkar	Training on Scientific Writing	13-17 February, 2022	Bangladesh	Participant
Md. Shirajul Islam Sarkar	International Year of Artisanal Fisheries and Aquaculture 2022	29-30 March, 2022	Thailand	Participant
Md. Shirajul Islam Sarkar	Go Blue for AMR   Preventing Antimicrobial Resistance Together	30 <sup>th</sup> November, 2022	Malaysia	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Prof. Dr. A. K. M. Azad Shah	Head, Department of Fisheries Technology	July 2021 to date
Dr. Murshida Khan	Assistant provost, Temporary female hall	May 2021 to date

### List of Publication by the Members of the Department

#### a) Journal

- Islam, N., Shaha, D. C., Hasan, J., Asad, M. H. A., Salam, M. A., Khan, M., Kundu, S. R., & Ahmed, M. (2022). Heavy metal pollution reduced the potentiality of pen culture in the wetland aquaculture in an urban area Bangladesh. *Conserv.* 2(1), 68-79.
- Khan, M., Afrin, M., Anjum, M., Khatun, A., Sabekunnahar, M., Tannisa, I. J., & Islam, M. M. (2022). A review of traditional fish processing methods practiced in Bangladesh. *Ecol. J.*, 4(1), 101-112.
- Khan, M., Paul, S. I., Rahman, M. M., & Lively, J. A. (2022). Antimicrobial resistant bacteria in shrimp and shrimp farms of Bangladesh. *Water*, 14, 3172.
- Khan, M., Zannaty, A., Rahman, M. M., Paul, S. I., & Shah, A. K. M. A. (2022). Antibiotic sensitivity of bacteria isolated from Nile tilapia (*Oreochromis niloticus*) fish from Gazipur fish market. *Ecol. J.*, 4(1), 47-54.
- Rasul, M. G., Faruk, M. O., Sarkar, M. S. I., Yuan, C., Akter, T., & Shah, A. K. M. A. (2022). Post-mortem biochemical, microbiological and sensory quality changes in Grass carp (*Ctenopharyngodon idella*) during ice storage. *Egypt. J. Aquat. Biol. Fish.* 26(5), 175-187.
- Rasul, M. G., Yuan, C., Yu, K., Takaki, K., & Shah, A. K. M. A. (2022). Factors influencing the nutritional composition, quality and safety of dried fishery products. *Food Res.*, 6(5), 444-466.
- Rasul, M. G., Yuan, C., Yu, K., Takaki, K., & Shah, A. K. M. A. (2022). Combined effect of moringa (*Moringa oleifera*) water extracts and vacuum packaging on the quality and lipid oxidation of the sun-dried Punti (*Puntius sophore*) during storage. *Egypt. J. Aquat. Biol. Fish.*, 26(1), 639-653.
- Sarkar, M. S. I., Hasan, M. M., Chowdhury, P., Rasul, M. G., Khan, M., Hossain, M. S., Islam, A. A., & Kamal, M. (2022). A review on blue economy in shrimp sector of Bangladesh. *Egypt. J. Aquat. Biol. Fish.*, 26(6), 1215-1236.
- Shaha, D. C., Hasan, J., Kundu, S. R., Yusoff, F. M., Salam, M. A., Khan, M., Haque, F., Ahmed, M., Rahman, M. J., & Wahab, M. A. (2022). Dominant phytoplankton groups as the major source of polyunsaturated fatty acids for hilsa (*Tenualosa ilisha*) in the Meghna estuary Bangladesh. *Sci. Rep.*, 12(1), 20980.



Wei, H., Rasul, M. G., Sun, Z., Yang, W., Huang, T., Yamashita, T., Takaki, K., & Yuan, C. (2022). Study on nucleotide, myofibrillar protein, biochemical properties and microstructure of freeze-dried Scallop striated muscle during storage and rehydration. *Food Res. Int.*, 158, 111461.

### Postgraduate Student's Information

Program	Number
MS	12
PhD	0
Total =	12

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	FIT 201	Fundamentals of Fish Microbiology	II	4.5	Dr. Murshida Khan Md. Shirajul Islam Sarkar
	FIT 301	Fish Handling and Preservation	III	4.5	Dr. Murshida Khan Md. Shirajul Islam Sarkar
	FIT 401	Fishery Products and By-products	IV	4.5	Dr. A. K. M. Azad Shah Dr. Md. Golam Rasul
Autumn	FIT 231	Fish Handling and Preservation	II	4.5	Dr. Murshida Khan Md. Shirajul Islam Sarkar
	FIT 331	Fish Processing Technology	III	4.5	Dr. A. K. M. Azad Shah Dr. Md. Golam Rasul
	FIT 431	Marine Food Chemistry	IV	4.5	Dr. A. K. M. Azad Shah Md. Shirajul Islam Sarkar
Winter	FIT 161	Fishing Technology	I	4.5	Dr. A. K. M. Azad Shah Dr. Md. Golam Rasul
	FIT 361	Microbiology of Fishery Products	III	4.5	Dr. Murshida Khan Dr. Md. Golam Rasul
	FIT 461	Quality Control of Fishery Products	IV	4.5	Dr. A. K. M. Azad Shah Dr. Murshida Khan

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Winter	FIT 514	Fishery by-Product Technology	MS	3.0	Dr. A. K. M. Azad Shah
	FIT 540	Quality Control of Fish and Fishery Product	MS	3.0	Dr. Murshida Khan
Summer	FIT 510	Fish Processing	MS	3.0	Dr. Md. Golam Rasul
	FIT 513	Fishery Product Technology	MS	3.0	Dr. A. K. M. Azad Shah
Autumn	FIT 501	Fish Preservation	MS	3.0	Dr. Murshida Khan
	FIT 531	Microbiology of Fish and Fishery Product	MS	3.0	Dr. Md. Golam Rasul



## Department of Genetics and Fish Breeding

[www.bsmrau.edu.bd/gfb/](http://www.bsmrau.edu.bd/gfb/)

### Faculty Members

#### Associate Professor

Dr. Md. Shahanoor Alam  
 Dr. Mohammad Abdus Salam  
 Dr. Zinia Rahman  
 Dr. Mohammad Shafiqul Alam  
 Dr. Mohammad Lutfar Rahman

#### Assistant Professor

Dr. Sabuj Kanti Mazumder

### Officers and Staff

Name	Designation
N. M. Harun-or-Rashid	Laboratory Technician
Md. Abdullah All Mamun	MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Umme Hani Mousumi (2019-08-5333)	Effects of Probiotics on The Breeding Performance of Goldfish ( <i>Carassius auratus</i> )	Dr. Zinia Rahman	Win/22
Avishek Kanti Barman (2019-08-5332)	The effects of the isolated plant endophytic yeasts from pineapples on the intestinal microflora and the reproductive performances of silver barb ( <i>Barbonymus gonionotus</i> )	Dr. Mohammad Abdus Salam	Sum/22
Md. Ashraful Alam Alit (2016-05-3961)	Effects of domestication process on growth, gonadal development and hematology of endangered spiny eel ( <i>Mastacembelus armatus</i> ).	Dr. Mohammad Lutfar Rahman	Sum/22
Redayea Ferdows Rakhi, (2016-05-3955)	Molecular characterization of seven populations of great snakehead fish ( <i>Channa marulius</i> ) by sequence analysis of mitochondrial CO1 gene	Dr. Mohammad Shafiqul Alam	Sum/22
Afroza Sultana (2016-05-3942)	Genetic variation in native populations of great snakehead fish ( <i>Channa marulius</i> ) by sequence analysis of mtDNA Cytb gene.	Dr. Mohammad Shafiqul Alam	Sum/22
Razuana Afrin (2016-05-3928)	Domestication and inter-species interaction of three native ornamental fishes of Bangladesh in captive condition	Dr. Mohammad Shafiqul Alam	Sum/22



Nazia Parveen (2019-11-5341)	All feminization of Nile tilapia, <i>Oreochromis niloticus</i> as a first step to produce YY supermale applying flaxseed extract	Dr. Md. Shahanoor Alam	Aut/22
Sutapa Debi (2020-05-5708)	Assessment of reproductive biology and broodstock development of <i>Puntius sophore</i> for species conservation and sustainable aquaculture	Dr. Sabuj Kanti Mazumder	Aut/22

### List of Research Project (Ongoing): Internal/External

Name the PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Md. Shahanoor Alam	Production of triploid rohu ( <i>Labeo rohita</i> ) through chromosome manipulation	RMW, BSMRAU TK. 1000000.00	2021 3 years
Dr. Md. Shahanoor Alam	Production of YY supermale tilapia applying herbal alternatives to synthetic steroid hormone through marker assisted selection	BENBEIS, MoE BDT 1500000.00	2021 3 years
Dr. Mohammad Abdus Salam	Effects of Java plum ( <i>Syzygium cumini</i> ) seed powder supplemented diets on growth immune response, hematology, breeding performances, growth and survival of fry and internal morphology of <i>Ompok pabda</i>	RMW, BSMRAU BDT 1200000.00	2020 3 years
Dr. Mohammad Abdus Salam	Effects of Java plum ( <i>Syzygium cumini</i> ) seed powder supplemented diets on the hematological profile, antioxidants and immune response of <i>Barbonymus gonionotus</i>	MoST, GoB BDT 350000.00	2022 1 year
Dr. Mohammad Abdus Salam	Effects of endophytic yeast strains <i>Pichia fermentans</i> MAS1 and <i>Meyerozyma caribbica</i> MAS2 on gut microbiota, reproductive performances, gonadal and larval development and growth and survival of fry of <i>Barbonymus gonionotus</i>	BENBEIS, MoE TK. 1900000.00	2022 3 years
Dr. Zinia Rahman	“Effects of Probiotics on Growth and Breeding Performance of Gold Fish	RMW, BSMRAU BDT 300000.00	2022 1 year
Dr. Zinia Rahman	Broodstock Management and Artificial Spawning Effectiveness of Ovupin in Goldfish ( <i>Carassius auratus auratus</i> ) in Hatchery Conditions	MoST, GoB Tk.3,00,000.00	2022 1 year
Dr. Mohammad Shafiqul Alam	Biosynthesis of potential nanoparticles using local plants and their utilization as fish feed additives for improved survivability, growth and antimicrobial impacts on tetra fish	RMW, BSMRAU BDT 1000000.00	2021 3 years





Dr. Mohammad Shafiqul Alam	Genetic structure of snakehead fishes (Channidae) in Bangladesh by mtDNA gene sequences	MoST, GoB BDT 250000.00	2022 1 year
Dr. Mohammad Lutfar Rahman	Study of the effects of endocrine hormone treatments on the reproductive performance and larval development of endangered freshwater spiny eel ( <i>Mastacembelus armatus</i> )	RMW, BSMRAU BDT 1200000.00	2020 3 years
Dr. Mohammad Lutfar Rahman	Effects of Bacillus probiotics on transportation induced stress tolerance of Carp ( <i>Labeo rohita</i> ) fingerlings	MoST, GoB BDT 200000.00	2022 1 year
Dr. Mohammad Lutfar Rahman	Effects of biofloc based single cell protein on the growth and reproduction of Nile tilapia ( <i>Oreochromis niloticus</i> ): a molecular approach	BANBEIS, MoE BDT 1800000.00	2022 3 years
Dr. Sabuj Kanti Mazumder	Synergistic effects of chitosan nanoparticles and vitamin E supplement on growth, haematology, innate immunity, gonadal development, and reproductive responses of Pabda fish	RMW, BSMRAU BDT 1000000.00	2021 3 years
Dr. Sabuj Kanti Mazumder	Severe environmental thermal-mediated changes in stress responses, acetylcholinesterase, and immune responses of Kalbasu <i>Labeo calbasu</i>	MoST, GoB BDT 250000.00	2022 1 year
Dr. Sabuj Kanti Mazumder	Extreme ambient temperature effects in Kalibaus ( <i>Labeo calbasu</i> ): metabolic, enzymatic and hemato-biochemical responses	UGC BDT 300000.00	2022 1 year

### List of Research Project (Completed): Internal/External

Name the PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. Md. Shahanoor Alam	All feminization of Nile tilapia, <i>Oreochromis niloticus</i> as a first step to produce YY supermale applying herbal extracts	MoST, GoB BDT 200000.00	2021 1 year
Dr. Mohammad Abdus Salam	Effects of Java plum ( <i>Syzygium cumini</i> ) seed powder supplemented diets on the growth, biochemical composition, gut microbiota and internal organ morphology of juvenile <i>Barbonymus gonionotus</i>	MoST, GoB BDT 300000.00	2022 1 year
Dr. Mohammad Shafiqul Alam	Survey, collect, domesticate and breeding trial of some native ornamental fishes	MoST, GoB BDT 200000.00	2022 1 year
Dr. Mohammad Lutfar Rahman	Effects of domestication process on growth, gonadal development and hematology of endangered spiny eel ( <i>Mastacembelus armatus</i> ).	MoST, GoB BDT 250000.00	2022 1 year



Dr. Sabuj Kanti Mazumder	Effect of high ambient temperature on growth performance, enzymatic and hemato-biochemical responses of Silver barb ( <i>Barbonymus gonionotus</i> )	MoST, GoB BDT 200000.00	2022 1 year
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### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Mohammad Abdus Salam	Head, Dept. of Genetics and Fish Breeding, Faculty of Fisheries, BSMRAU	From July 1, 2021 to June 30, 2023.
Dr. Mohammad Abdus Salam	Associate Director (Publication)	2021-2023
Dr. Mohammad Lutfar Rahman	Assistant Proctor	2021-2023
Dr. Sabuj Kanti Mazumder	Assistant Proctor	2021-2023

### List of Publication by the Members of the Department

#### a) Journal

- Alam, M. S., Roy, A., Shathi, S. B., Deb, S., Alam, M. S., & Mondal, M. N. (2022). Dose Optimization of 17  $\alpha$ -Methyltestosterone to Maximize Sex Reversal of Nile Tilapia (*Oreochromis Niloticus*). *Research in Agriculture Livestock and Fisheries*, 9(3), 377-384.
- Alam, M. S., Shathi, S. R., Alam, M. S., Mohit, A.A., & Islam, S. F. (2022). Biofloc technology: an innovative approach in fish nutrition and healthcare. *Ecol. J.*, 4 (2), 213-220.
- Bhuyain, A. S. M. S. R., Barman, S. K., Hossain, M. M., Khan, M. M. H., Mim, K. K., & Mazumder, S. K. (2022). Seasonal dynamics of heavy metal concentrations in water and fish from Hakaluki Haor of Bangladesh. *Conservation*, 2(3), 473-484.
- Hasan, J., Shaha, D. C., Ahmed, M., Haque, S. M., Haque, F., Ahsan, M. E., ... & Salam, M. A. (2022). Outwelling of nutrients into the Pasur River estuary from the Sundarbans mangrove creeks. *Heliyon*, 8(12), e12270.
- Hasan, J., Shaha, D. C., Kundu, S. R., Yusoff, F. M., Cho, Y. K., Haque, F., Salam, M. A.,... & Afrad, M. S. I. (2022). Phytoplankton community in relation to environmental variables in the tidal mangrove creeks of the Pasur River estuary, Bangladesh. *Conservation*, 2(4), 587-612.
- Islam, N., Shaha, D. C., Hasan, J., Asad, M. H. A., Salam, M. A., Khan, M., ... & Ahmed, M. (2022). Heavy Metal Pollution Reduced the Potentiality of Pen Culture in the Wetland Aquaculture in an Urban Area of Bangladesh. *Conservation*, 2(1), 68-79.
- Jannat, B., Kanon, K. F., Sultana, N., Alam, M. S., & Alam, M. S. (2022). Morphological variations between native and Vietnam-originated striped snakeheads (*Channa striata*) in Bangladesh. *Bangladesh Journal of Fisheries*, 34(1), 41-52.
- Mia, M. R., Uddin, M. S., Alam, M. T., Pandit, D., & Mazumder, S. K. (2022). Habitat and biodiversity degradation of the Surma River, Bangladesh and implications for future management. *Journal of the Bangladesh Agricultural University*, 20(1), 103-115.
- Mustafi, S. K., Kunda, M., Khan, A. F., Mazumder, S. K., & Pandit, D. (2022). Conserving nutrient rich small indigenous species of fish in the wetlands of north-eastern Bangladesh. *Aquaculture, Aquarium, Conservation & Legislation*, 15(4), 2238-2252.
- Nahar, N., Hossain, M. I., Uddin, M. J., & Rahman, M. L. (2022). Effects of feeding rate on growth and production of stinging catfish, heteropneustes fossilis (bloch 1974) in cage monoculture system. *J. Bio-Sci.* 30(1), 01-09.



- Rahman M. L., Dipu S. Y., Haque F., Rafiqzaman S. M., Alam M. S. (2022). Evaluation of breeding and growth performances of crossbreds and backcrossbreds with purebreds of Bangladeshi and Vietnamese climbing perch (*Anabas testudineus*). *Aquaculture Fish and Fisheries*.
- Saha, J., Hossain, M. A., Mamun, M. A., Islam, M. R., & Alam, M. S. (2022). Effects of carbon-nitrogen ratio manipulation on the growth performance, body composition and immunity of stinging catfish *Heteropneustes fossilis* in a biofloc-based culture system. *Aquaculture Reports*, 25, 101274.
- Shaha, D. C., Cho, Y. K., Kundu, S. R., Hasan, J., Haque, F., and Salam, M. A. (2022). The calculation of flushing time for the upper Pasur River Estuary, Bangladesh. *Terrestrial, Atmospheric and Oceanic Sciences*, 33(1), 1-15.
- Shaha, D. C., Hasan, J., Kundu, S. R., Yusoff, F. M., Salam, M. A., Khan, M., & Wahab, M. A. (2022). Dominant phytoplankton groups as the major source of polyunsaturated fatty acids for hilsa (*Tenualosa ilisha*) in the Meghna estuary Bangladesh. *Scientific Reports*, 12(1), 20980.
- Zahangir, M. M., Rahman, M. L., & Ando, H. (2022). Anomalous Temperature Interdicts the Reproductive Activity in Fish: Neuroendocrine Mechanisms of Reproductive Function in Response to Water Temperature. *Front. Physiol.* 13, 902257. doi: 10.3389/fphys. 2022.902257.

#### b) Book/Book Chapter

- Kawser A. Q. M. R., Islam T., Alam M. S., Rahman M.M., & Salam M. A. (2022) Mechanisms of the Beneficial Effects of Probiotic *Bacillus* spp. in Aquaculture. In: Islam M.T., Rahman M., Pandey P. (eds) *Bacilli in Agrobiotechnology. Bacilli in Climate Resilient Agriculture and Bioprospecting*. Springer, Cham. [https://doi.org/10.1007/978-3-030-85465-2\\_20](https://doi.org/10.1007/978-3-030-85465-2_20)
- Shuva, S. & Mazumder, S. K. (2022). Unraveling complexities: Towards a Typology of Small-Scale Fisheries in Kaptai Lake, Bangladesh. In: *Small in Scale, Big in Contributions: Advancing Knowledge of Small-Scale Fisheries in Bangladesh*. Ed. Islam, M.M. TBTI Global Book Series, St. John's, NL, Canada.

#### Postgraduate Student's Information

Program	Number
MS	31
PhD	-
Total =	31

#### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GFB318	Hatchery and Nursery Management of Finfish	III	3.0+1.5	Dr. Sabuj Kanti Mazumder Dr. Mohammad Lutfar Rahman
	GFB326	Fish Breeding	III	3.0+1.5	Dr. Mohammad Lutfar Rahman Dr. Md. Shahanoor Alam
Autumn	GFB331	Hatchery and Nursery Management of Shell fish	III	3.0+1.5	Dr. Mohammad Abdus Salam Dr. Sabuj Kanti Mazumder



Winter	GFB 161	Fundamentals of Cell Biology	I	3.0+1.5	Dr. Zinia Rahman Dr. Mohammad Shafiqul Alam
	GFB261	Principles of Genetics	II	3.0+1.5	Dr. Md. Shahanoor Alam Dr. Mohammad Abdus Salam
	GFB 461	Fish Biotechnology	IV	3.0+1.5	Dr. Mohammad Shafiqul Alam Dr. Zinia Rahman

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GFB 501	Fish Breeding and Stock Improvement	MS	3.0	Dr. Md. Shahanoor Alam
	GFB 511	Cytogenetics of Aquatic Animals	MS	3.0	Dr. Mohammad Abdus Salam Dr. Mohammad Lutfar Rahman
	GFB542	Fish Population and Conservation Genetics	MS	3.0	Dr. Mohammad Shafiqul Alam
Autumn	GFB521	Hatchery Management	MS	3.0	Dr. Zinia Rahman
	GFB 531	Fish Genetic Engineering	MS	3.0	Dr. Md. Shahanoor Alam/ Dr. Zinia Rahman
	GFB 551	Phylogenetics and Evolution of Fishes	MS	3.0	Dr. Mohammad Shafiqul Alam
Winter	GFB 541	Molecular Genetics of Fish	MS	3.0	Dr. Mohammad Abdus Salam
	GFB 552	Experimental Design and Genetic Data Analysis	MS	3.0	Dr. Mohammad Shafiqul Alam
	GFB 512	Molecular Ecology of Fishes	MS	3.0	Dr. Zinia Rahman





## **Faculty of Veterinary Medicine and Animal Science**

- Department of Anatomy and Histology
- Department of Animal Breeding and Genetics
- Department of Animal Science and Nutrition
- Department of Dairy and Poultry Science
- Department of Gynecology, Obstetrics and Reproductive Health
- Department of Medicine
- Department of Microbiology and Public Health
- Department of Pathobiology
- Department of Physiology and Pharmacology
- Department of Surgery and Radiology



## Faculty of Veterinary Medicine and Animal Science

www.bsmrau.edu.bd/fvmass

### Dean

Prof. Dr. Md. Golam Haider, 15.12.2021 to till now

### Officers and Staff

Name	Designation
Abu Hanif Palowan	Assistant Registrar
Sapna Shamon Hema	Assistant Registrar
Debbrotha Dash	Administrative Officer
S. M. Shamim Ahsan	Administrative Officer
Mst. Rashida Begum	Senior MLSS

### Admission Statistics of DVM Students in 2022

Term	Summer Term	Remarks
No. of student admitted	62	Nepali: 02
No. of student admitted from merit list	62	
No. of student admitted from FF Quota	03	
No of student admitted from Tribal Quota	02	
No of student admitted from waiting list	00	
Minimum GPA of the admitted student	5.00 (HSC)	
Maximum GPA of the admitted student	5.00 (HSC)	

### Year and term-wise students' enrolment, exams held, results published and students passed in DVM programs in 2022.

#### 1<sup>st</sup> year

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	60	06 February, 2022	12-19 May, 2022	01-08-2022	58
Autumn	55	05 June, 2022	29 August-04 September, 2022	21-11-2022	54
Winter	51	10 October, 2022	24-31 December, 2022	05.03.2023	51

#### 2<sup>nd</sup> year

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	70	06 February, 2022	12-19 May, 2022	01-08-2022	68
Autumn	70	05 June, 2022	29 August-04 September, 2022	21-11-2022	69
Winter	70	10 October, 2022	24-31 December, 2022	05.03.2023	70

**3<sup>rd</sup> year**

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	66	06 February, 2022	12-19 May, 2022	01-08-2022	66
Autumn	66	05 June, 2022	29 August-04 September, 2022	21-11-2022	66
Winter	66	10 October, 2022	24-31 December, 2022	05.03.2023	66

**4<sup>th</sup> year**

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	60	06 February, 2022	12-19 May, 2022	01-08-2022	60
Autumn	60	05 June, 2022	29 August-04 September, 2022	21-11-2022	60
Winter	60	10 October, 2022	24-31 December, 2022	05.03.2023	60

**5<sup>th</sup> Year**

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	52	06 February, 2022	12-19 May, 2022	01-08-2022	52
Autumn	52	05 June, 2022	29 August-04 September, 2022	21-11-2022	52
Winter	52	10 October, 2022	24-31 December, 2022	05.03.2023	52

**Table 1. Curricular Layout for DVM Program****1<sup>st</sup> year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
ANH 101	3+1=4	ANH 131	3+1=4	PHP 161	3+1=4
ANH 102	3+1=4	ANH 132	3+1=4	MPH 161	3+1=4
MPH 101	2+1=3	DPS 131	2+1=3	ASN 161	2+1=3
ASN 101	2+1=3	BMB 131	3+1=4	DPS 161	2+1=3
GEU 101	2+0=2	CST 131	0+1=1	BMB 161	3+0=3
		GEU 131	2+0=2		
	12+4= (16)		13+5 (18)		13+4 (17)

Total Credit Hrs. for 1st year = 49 (36+13)

**2<sup>nd</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
ASN 201	2+1=3	PHP 231	2+0=2	PHP 261	3+1=4
PHP 201	3+1=4	MPH 231	3+1=4	MPH 261	3+1=4
ABG 201	3+1=4	PBL 231	3+1=4	PBL 261	3+1=4
DPS 201	3+1=4	ASN 231	2+1=3	ASN 261	2+1=3
AEC 201	3+0=3	PBL 232	3+1=4	DPS 261	2+1=3
				ANH 261	0+1=1
	14+4 =(18)		13+4=(17)		13+6=(19)

Total Credit hrs. for year =54 (40+14)



**3<sup>rd</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
PHP 301	3+0=3	PHP 331	3+1=4	ANH 361	0+1=1
MPH 301	2+1=3	PBL 331	3+0=3	PBL 361	3+1=4
PBL 301	3+1=4	ASN 331	3+1=4	MED 361	3+1=4
PBL 302	3+1=4	DPS 331	2+1=3	SRA 361	3+1=4
GEU 301	2+0=2	STC 331	3+1=4	ABG 361	3+1=4
				ASN 361	2+1=3
13+3 (16)			14+4=(18)		14+6 (20)

Total Credit hrs, for 3<sup>rd</sup> year = 54 (41+13)

**4<sup>th</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
MED 401	3+1=4	MPH 431	3+1=4	MED 461	2+0=2
SRA 401	2+1=3	MED 431	3+1=4	MED 462	3+1=4
SRA 402	2+1=3	MED 432	3+1=4	SRA 461	2+1=4
GOR 401	3+1=4	SRA 431	3+1=4	GOR 461	3+1=4
DPS 401	2+1=3	GOR 431	2+1=3	GOR 462	2+1=3
				AER 461	3+1=4
12+5 (17)			14+5 (19)		15+5 (20)

Total Credit hrs. for 4<sup>th</sup> year=56 (41+15)

**5<sup>th</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
PHP 501	0+2=2	INT 531		INT 561	16
MPH 501	2+0=2	Internship Program I:		Internship Program II:	
PBL 501	0+2=2	Feed Processing & Milling		(a) Poultry Farm Practices. Aquatic,	
MED 501	3+0=3	Practices. Beef & Goat		Zoo & Wildlife Practices. Vaccine	
MED 502	0+2=2	Farm Practices. Public	12	Production Practices. On Farm	
SRA 501	0+2=2	Health & Slaughter House		Clinical Practices. Hospital Practices	
GOR 501	0+2=2	Practices. Diagnostic		(Pet Animals). Rural Camp Practices	
AGB 501	3+0=3	Practices. Hospital		(Motivation, Extension, Treatment & Vaccination).	
		Practices (Farm Animals),		(b) Board Examination	
		Fertility & AI Practices.			
8+10=18			12		16

Total Credit hrs. for 5<sup>th</sup> year=46 (18+12+16)

**Total Course=74, Total Credit hrs.=261 (Theory 168 Cr. Hrs. + Practical 65 Cr. Hrs.+ Internship 28 Cr. Hrs.)**



## Department of Anatomy and Histology

[www.bsmrau.edu.bd/anh/](http://www.bsmrau.edu.bd/anh/)

### Faculty Members

#### Associate Professor

Dr. Mohammad Shah Alam  
Dr. Md. Abdullllah-Al-Mahmud

#### Assistant Professor

DR. Nure Jannat (Study leave)  
DR. Tanjina Amin

#### Lecturer

DR. Md. Mahmudul Amin  
DR. Md. Arman Sharif

### Officers and Staff

Name	Designation
Md. Shariful Islam	Assistant technical Officer
Bijon Kumar Das	Senior Laboratory Technician
Masud Rana	MLSS

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Mohammad Shah Alam Co-PI: Md. Mahmudul Amin	Effects and mechanisms of environmental endocrine disruptor, atrazine on male germ cells	MoST, GoB BDT 200000.00	2022
PI: Dr. Mohammad Shah Alam Co-PI: Dr. Md. Abdullllah-Al-Mahmud	Molecular mechanism(s) of testicular cytotoxic effects induced by silver nanoparticle (AgNPs) in mice	RMW, BSMRAU BDT 1100000	2021
PI: Dr. Md. Abdullllah-Al-Mahmud Co-PI: Dr. Md. Aatur Rahman	Histological and microbiological evaluation of surgical wound healing in cat	MoST, GoB BDT 200000.00	2022
PI: Md. Mahmudul Amin Co-PI: Tanjina Amin	Effect of Vitamin B Supplementation on Mosquito Coil-Induced Complications on Behavior and Cognition of Mice	RMW, BSMRAU BDT 100000.00	2022
PI: Md. Arman Sharif Co-PI: Dr. Md. Abdullllah-Al-Mahmud	Hematobiochemical and Histotoxicological Effects of Dietary Supplementation of Soybean and Mustard oil on Heart, Liver and Kidney of Swiss albino mice	RMW, BSMRAU BDT 100000.00	2022



### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Md. Mahmudul Amin	Development of herbal extract formulation for the treatment of diabetes mellitus	RMW, BSMRAU BDT 100000.00	2022
PI: Md. Arman Sharif	Development of Plastination Technique for Preservation of Animals and Birds viscera	RMW, BSMRAU BDT 100000.00	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Mohammad Shah Alam	The 8 <sup>th</sup> Congress of the AAVA in CVASU	Oct. 30-31, 2022	Bangladesh	Oral presentation
Dr. Mohammad Shah Alam	International ICEPSD-2022 in DU	September 2-4, 2022	Bangladesh	Oral presentation
Md. Mahmudul Amin	The 8 <sup>th</sup> Congress of the AAVA in CVASU	Oct. 30-31, 2022	Bangladesh	Poster presentation
Md. Arman Sharif	The 8 <sup>th</sup> Congress of the AAVA in CVASU	Oct. 30-31, 2022	Bangladesh	Poster presentation
Md. Mahmudul Amin	Statistical Data Analysis, IQAC, BSMRAU	27-28 November, 2022	Bangladesh	Trainee
Md. Mahmudul Amin	Scientific Writing, IQAC, BSMRAU	13-17 February, 2022	Bangladesh	Trainee
Md. Arman Sharif	Statistical Data Analysis, IQAC, BSMRAU	27-28 November, 2022	Bangladesh	Trainee
Md. Arman Sharif	Scientific Writing, IQAC, BSMRAU	13-17 February, 2022	Bangladesh	Trainee

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Abdullah-Al-Mahmud	Head, Dept. of ANH	February 1, 2022- to date
Dr. Mohammad Shah Alam	Associate Director, Dr. M. A. Wazed Mia Central Lab., BSMRAU, Bangladesh	August 2021- to date

### List of Publication by the Members of the Department

#### a) Journal

- Amin, M. M. (2022). Hazardous effects of smoke and smokeless mosquito coils on the fertility and respiratory functions in rats. *J. Bangladesh Agric. Univ.*, 20(4), 407-412.
- Ayman, U., Akter, L., Islam, R., Bhakta, S., Rahman, M. A., Islam, M. R., Sultana, N., Arman S., Mir R. J., Rahman, M. S., & Haque, Z. (2022). Dietary Chitosan Oligosaccharides Improves Health Status in Broilers for Safe Poultry Meat Production. *Ann. of Agric. Sci.*, 67(1), 90-98.



- Meher, M. M., Sharif, M. A., & Bayazid, A. A. (2022). Seroprevalence of Salmonella spp. Infection in Different Types of Poultry and Biosecurity Measures Associated with Salmonellosis. *Int. J. Agric. Env. Food Sci.*, 6(4), 557-567.
- Rahman, M. A., Rahman, M. T., Saha, M., Sadi, R. S., Labib, M. T. R., Hasan, M. F., Haider, M. G., Rahman, M. M., & Alam, M. S. (2022). A Case Report on Euthanasia of a Rescued Horse Using Xylazine Hydrochloride and Thiopental Sodium. *Res. Agric. Liv. Fis.*, 9(2), 213–219.
- Shathi, S. A., Aziz, F. B., Hasan, M. M., Islam, R., Meher, M. M., and Sharif, M. A. (2022). Phytochemical and Pharmacological Evaluation along with Antimicrobial Properties of Gynura Procumbens Leaves Extract. *J. Bangladesh Agric. Univ.*, 20(2), 141–149.

### Postgraduate Student's Information

Program	Number
MS	6
PhD	0
Total =	6

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit (T+P)	Instructor(s)
<b>Year 2022</b>					
Summer	ANH 101	Gross Anatomy I	I	3+1=4	Dr. Mohammad Shah Alam DR. Md. Mahmudul Amin
	ANH 102	General Histology & Embryology	I	3+1=4	Dr. Md. Abdullah-Al-Mahmud DR. Md. Arman Sharif
Autumn	ANH 131	Gross Anatomy II	I	3+1=4	Dr. Mohammad Shah Alam DR. Md. Mahmudul Amin
	ANH 132	Systemic Histology	I	3+1=4	Dr. Md. Abdullah-Al-Mahmud DR. Md. Arman Sharif
Winter	ANH 261	Comparative Anatomy & Neuro-antatomy	II	1.5	Dr. Mohammad Shah Alam DR. Tanjina Amin
	ANH 361	Topographic & Surgical Anatomy	III	1.5	Dr. Md. Abdullah-Al-Mahmud DR. Md. Mahmudul Amin

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	ANH 601	Developmental Anatomy	MS	3.0	Dr. Mohammad Shah Alam
	ANH 610	Animal Cell and Molecular Biology	MS	3.0	Dr. Md. Abdullah-Al-Mahmud



Autumn	ANH 640	Avian Anatomy and Histology	MS	3.0	Dr. Md. Abdulllah-Al-Mahmud
	ANH 645	Anatomy and Histology of Immune System	MS	3.0	Dr. Mohammad Shah Alam
	ANH 656	Comparative Anatomy	MS	3.0	Dr. Mohammad Shah Alam
	ANH 660	Applied Anatomy and Neuro-Anatomy	MS	3.0	Dr. Md. Abdulllah-Al-Mahmud
Winter	ANH 620	Ruminant and Equine Anatomy	MS	3.0	Dr. Mohammad Shah Alam
	ANH 630	Veterinary Histology	MS	3.0	Dr. Md. Abdulllah-Al-Mahmud
	ANH 635	Histochemistry and Histological Techniques	MS	3.0	Dr. Mohammad Shah Alam Dr. Md. Abdulllah-Al-Mahmud
	ANH 660	Applied Anatomy and Neuro-Anatomy	MS	3.0	Dr. Md. Abdulllah-Al-Mahmud



## Department of Animal Breeding and Genetics

www.bsmrau.edu.bd/abg/

### Faculty Members

#### Associate Professor

Dr. S. A. Masudul Hoque

Dr. Md. Mazharul Islam

### Officers and Staff

Name	Designation
Noor Ahmed	Lab Technician

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Md. Mazharul Islam Co-PI: Dr. S. A. Masudul Hoque	Development of baseline population towards a broiler duck variety using artificial insemination technique	RMW BDT 900000.00	2022
PI: Dr. Md. Mazharul Islam Co-PI: Dr. S. A. Masudul Hoque	Effect of Moringa Extract on Productive and Reproductive performance of Duck	MoST, GoB BDT 200000.00	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. S. A. Masudul Hoque Co-PI: Shabbir Ahmed	Use of mitochondria-targeted antioxidants from natural sources towards the resumption of ovarian endocrine function in aged female	MoST, GoB BDT 200000.00	2022

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. S. A. Masudul Hoque	Head, Animal Breeding and Genetics	Up to September 19, 2022
Dr. Md. Mazharul Islam	Head, Animal Breeding and Genetics	September 20, 2022 to date

### List of Publication by the Members of the Department

#### a) Journal

Ahmed, S., Habiba, M. U., Hossain, M. D., Hoque, S. A. M., & Rahman, M.M. (2022). Retardation of oxidative rancidity in ghee adding orange peel powder at different storage temperature. *J. Food Sci. Tech.*, 60, 243-251.

Alam, M. A., Hasan, M. T., Hossain, M. D., Ahmed, S., Hoque, S. A. M., Hossain, M. M., & Rahman, S. M. E. (2022). Meat processing and handling facilities in slaughterhouses of selected areas of Bangladesh. *Bangladesh J. Ani. Sci.*, 51(3), 115-121.

Begum, M. S., Hoque, S. A. M., Ali, M. Y., & Khandoker, M. A. M. Y. (2022). The Dam's milk yield and growth performance of Black Bengal kids under semi-intensive production system in Bangladesh.



*International J. Livestock Res.*, 12(5), 1-8.

Hossain, M. D., Salam, M. A., Ahmed, S., Habiba, M. U., Akhtar, S., Islam, M. M., Hoque, S. A. M., Selim, A. S. M., & Rahman, M. M. (2022). Relationship of Meteorological Data with Heat Stress Effect on Dairy Cows of Smallholder Farmers. *Sustainability*, 15 (1), 85.

Khatun, A., Hoque, S. A. M., Ali, M. Y., & Khandoker, M. A. M. Y. (2022). Estrus synchronization in Black Bengal goat using synthetic progesterone. *J. Agri. Food Env. (JAFE)*, 3(1), 33-38.

Touhid, M. M., Hasan, M.T., Kamal, M.T., Islam, M. M., Azad, M. A. K., & Hashem, M. A. (2022). Addition of wheat flour in chicken meatball increases the food value through prompting sensory, physicochemical, biochemical and microbial properties. *Meat Res.*, 2(4), 1-10.

Zhang, W., Min, L., Li, Y., Lang, Y., Hoque, S. A. M., Adetunji, A.O., & Zhu, Z. (2022). Beneficial effect of proline supplementation on goat spermatozoa quality during cryopreservation. *Animals*. 12(19), 2626.

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	ABG 201	Animal Genetics	II	4.0	Dr. S. A. Masudul Hoque Dr. Md. Mazharul Islam
Winter	ABG 301	Animal Breeding	III	4.0	Dr. S. A. Masudul Hoque Dr. Md. Mazharul Islam

### Other's Information (if any):

Animal Breeding and Genetics department is going to start MS in Animal Breeding and Genetics program very soon. The course curriculum and lay-out for MS in Animal Breeding and Genetics program already finalized through workshop and BOS meeting. Approval from the Academic Council of BSMRAU and University Grants Commission (UGC) of Bangladesh is underway.



## Department of Animal Science and Nutrition

[www.bsmrau.edu.bd/asn/](http://www.bsmrau.edu.bd/asn/)

### Faculty Members

#### Professor

Dr. Abu Sadeque Md. Selim

Dr. Shilpi Islam

#### Associate Professor

Dr. A.B.M. Rubayet Bostami

#### Assistant Professor

Md. Delowar Hossain

Md. Rashidul Islam

### Officers and Staff

Name	Designation
Momraz Alam,	Technical officer
Md. Abdul Wahab Ali	MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Rakibul Hasan (14-05-3344)	Assessment of of seaweed in terms of nutrient content and <i>in vitro</i> ruminal degradation	Dr. Abu Sadeque Md. Selim	Sum/22
Sabyasachi Chakma (14-05-3354)	Exploring the current status and management of the pig production system in the Rangamati district of Bangladesh	Dr. Abu Sadeque Md. Selim	Sum/22
Md. Obydur Rahman (2018-11-4932)	Effect of industrial effluent on yield and quality of maize fodder	Dr. Shilpi Islam	Sum/22
Nayan Mondal (2019-08-5334)	Industrial Effluent Effect on Napier Grass ( <i>Pennisetum purpureum</i> ) Production	Dr. Shilpi Islam	Sum/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Shilpi Islam	Assessment of toxic heavy metal and trace mineral in commercial poultry feed and meat available at Gazipur district	MoST, GoB BDT 250000.00	2022-2023
Dr. Shilpi Islam	Effect of industrial effluent (heavy metal) on yield and nutrient composition in some common grasses for livestock	RMW, BSMRAU BDT 300000.00	2021-2024
Dr. A.B.M. Rubayet Bostami	Effect of Ensiling Additives on Performance Indices and Rumen Fermentation Pattern in Sheep	RMW, BSMRAU BDT 900000.00	2021-2024





### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. Shilpi Islam	Assessment of heavy metal concentration in different grasses available at BSMRAU campus	MoST, GoB BDT 200000.00	2021-2022
Dr. A.B.M. Rubayet Bostami	Supplementation of Basal Diet with Natural Antioxidant-rich Sources on Duck ( <i>Anas platyrhynchos</i> ) Growth Performance and Meat Quality	MoST, GoB BDT 200000.00	2021-2022

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Abu Sadeque Md. Selim	Director (International)	February 2022 to February 2024
Dr. Shilpi Islam	Head, Animal Science and Nutrition	November 2021 to November 2023
Dr. A.B.M. Rubayet Bostami	Incharge, Livestock and Poultry Farm	July 2019 to January 2022
Md Rashidul Islam	Assistant Provost, Shaheed Ahsanullah Master Hall, BSMRAU	October 2021 to October 2023

### List of Publication by the Members of the Department

#### a) Journal

- Ahmed, S., Habiba, M. U., Hossain, M. D., Hoque, S. A. M., & Rahman, M.M. (2022). Retardation of oxidative rancidity in ghee adding orange peel powder at different storage temperature. *J. Food Sci. Tech.*, 60, 243-251.
- Barua, K., Akter, N., Alam, M., Bari, M. S., Sultan, M. N., Islam, S., & Hossain, M. E. (2022). Effects of genotype, parity, season and their milk yield in crossbred dairy cattle. *J Anim Physiol Anim Nutr.*, 106(6), 1216-1227.
- Bostami, A. B. M. R., Khan, M. R. I., Selim, A. S. M., Hossain, M. D., & Khairunnesa, M. (2022). Physico-chemical parameters and sensory attributes of different chicken meat of consumer's choice from poultry market. *Meat Research*, 2(2).
- Hendawy, A. O., Sugimura, S., Sato, K., Mansour, M. M., El-Aziz, A., Ayman, H., Samir, H., Islam, M. M., Bostami, A.B.M. R., & Ali, A. M. (2022). Effects of Selenium Supplementation on Rumen Microbiota, Rumen Fermentation and Apparent Nutrient Digestibility of Ruminant Animals: A Review. *Fermentation*, 8(1), 4.
- Samanta, P., Akter, N., Islam, S., Islam, S., & Hossain, E. (2022). A response surface model to predict the profitability of raising small scale free range domestic pigeon. *OJAFR*, 12(4), 179-186.
- Selim, A. S. M., Hasan, N., Rahman, A., Rahman, M., Islam, R., Bostami, A. B. M. R., Islam, S., & Tedeschi, L. O. (2022). Nutrient content and in vitro degradation study of some unconventional feed resources of Bangladesh. *Heliyon*, 8(5), e09496.

### Postgraduate Student's Information

Program	Number
MS	10
PhD	-
Total =	10

**Courses Offered by the Department at Undergraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	ASN 101	General Animal Science		2+1	Dr. A.B.M. Rubayet Bostami Md. Delowar Hossain
	ASN 201	Fodder Production		2+1	Dr. Abu Sadeque Md. Selim Md Rashidul Islam
	ASN 216	Introductory Animal Science		2+1	Dr. Shilpi Islam Md. Delowar Hossain
Autumn	ASN 231	Wildlife, Zoo, Aquatic & Companion Animal Management		2+1	Dr. A.B.M. Rubayet Bostami Md. Delowar Hossain
	ASN 331	Ruminant Nutrition, Feeds & Feeding		2+1	Md Rashidul Islam Dr. Abu Sadeque
	ASN 261	Non-ruminant Nutrition, Feeds & Feeding		2+1	Md Rashidul Islam Dr. Shilpi Islam
Winter	ASN 161	Draught and Meat Animal Production & Management		2+1	Dr. Shilpi Islam Md. Delowar Hossain
	ASN 261	Non-ruminant Nutrition, Feeds & Feeding		2+1	Dr. Abu Sadeque Md. Selim
	ASN 361	Meat Science and Wool Technology & Livestock Waste Management		3+1	Dr. A.B.M. Rubayet Bostami Md. Delowar Hossain

**Courses Offered by the Department at Postgraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	ASN 603	Non-ruminant and Avian Nutrition	MS	3.0	Dr. Abu Sadeque Md. Selim
	ASN 633	Nutrient Requirements for Livestock	MS	3.0	Dr. Shilpi Islam
Autumn	ASN 661	Feed Processing, Conservation and Evaluation	MS	3.0	Dr. Abu Sadeque Md. Selim
	ASN 631	Nutrition and Reproduction	MS	3.0	Dr. Shilpi Islam
Winter	ASN 601	Ruminant Nutrition	MS	3.0	Dr. Abu Sadeque Md. Selim
	ASN 611	Feed Milling Industry	MS	3.0	Dr. Shilpi Islam



## Department of Dairy and Poultry Science

www.bsmrau.edu.bd//dps

### Faculty Members

#### Professor

Dr. Md. Aminul Islam

Dr. Md. Morshedur Rahman

#### Assistant Professor

Shabbir Ahmed

Most. Khairunnesa (on study leave from March 2022)

Mst. Umme Habiba

### Staff

Name	Designation
Md. Maksodur Rahman	Lab. Technician

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Sabrina Akter Ononna 19-08-5335	Isolation of Exopolysaccharide Producing <i>Streptococcus</i> sp. from Traditional Dahi of Gazipur District	Dr. Md. Morshedur Rahman	Sum/2022

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Md. Morshedur Rahman (PI) Dr. Abu Sadeque Md. Selim (Co-PI) Dr. S.A. Masudul Hoque (Co-PI)	Climate change impact on livestock and poultry- a special focus on heat stress and enteric methane emission funded by Kishi Gobeshona Foundation (KGF) and poultry- a special focus on heat stress and enteric methane emission	KGF BDT 32924000.00	2020
Md. Morshedur Rahman (PI) Shabbir Ahmed (Co-PI)	Establishment and validation of ICP-MS-based methods to analyze major and trace elements in milk and dairy products of Bangladesh with special focus on powdered milk and infant formula	RMW, BSMRAU BDT 960000.00	2020
Dr. Md. Morshedur Rahman (PI) Dr. Md. Tofazzal Islam (Co-PI) Shabbir Ahmed (Co-PI), Mst. Umme Habiba (Co-PI)	Unlocking the microbial diversity in artisanal 'Buffalo Milk Curd' to formulate probiotic based bio-functional starter culture towards developing healthy Dahi Institute	BLRI, MoFL BDT 2800000.00	2022



Mst. Umme Habiba (PI)	Molecular Identification, bacteriocin gene detection and safety evaluation of <i>Leuconostoc</i> spp. isolated from Traditional Buffalo Milk Curd	RMW, BSMRAU BDT 100000.00	2022
Mst. Umme Habiba (PI)	Production of exopolysaccharide enriched dahi from food grade <i>Leuconostoc</i> spp.	MoST, GOB BDT 90000.00	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Mst. Umme habiba	Isolation and identification of antimicrobial potent <i>Leuconostoc</i> sp. from traditional buffalo milk curd available in Bhola district of Bangladesh	RMW, BSMRAU BDT 100000.00	June 2022
Shabbir Ahmed (PI) Dr. Md. Morshedur Rahman (Co-PI)	Antioxidant activity of orange peel extracts in ghee at different storage temperature (UGC funded as PI)	UGC BDT 300000.00	June 2022
Dr. S. A. Masudul Hoque (PI), Shabbir Ahmed (Co-PI)	Use of mitochondria-targeted antioxidants from natural sources towards the resumption of ovarian endocrine function in aged female	MoST, GOB BDT 200000.00	June 2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Aminul Islam	Seminar on Innovative Technologies for Animal Production: Bangladesh and Global Perspective organized by Bangladesh Society for Animal Production Education and Research (BSAPER)	22/08/2022	Bangladesh	Participation
Dr. Md. Morshedur Rahman	Training-of-Trainers (ToT) on Climate Change Project Proposal Development for accessing International Climate Funds organized by GIZ and Economic Relations Division (ERD), Ministry of Finance in Bangladesh.	27/5/2022 to 02/06/2022	Bangladesh	Trainee
Dr. Md. Morshedur Rahman	1st Write Shop on “GCF Concept Note Development on Climate Resilient Agriculture” organized by FAO, Bangladesh	5-7 July 2022	Bangladesh	Prepare concept note



Dr. Md. Morshedur Rahman	2nd Write Shop on “GCF Concept Note Development on Climate Resilient Agriculture” organized by FAO, Bangladesh	14-16 November 2022	Bangladesh	Prepare concept note
Shabbir Ahmed	Seminar on Innovative Technologies for Animal Production: Bangladesh and Global Perspective organized by Bangladesh Society for Animal Production Education and Research (BSAPER)	22/08/2022	Bangladesh	Participation

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Aminul Islam	Head, Department of Dairy and Poultry Science	7 January 2021 to 6 January 2023
Shabbir Ahmed	In Charge Livestock and Poultry Farm	01 February 2022 to 14 February 2023
Mst. Umme Habiba	Assistant Provost, Female Hall (Temporary)	January 12 January 2022 to 11 January 2024

### List of Publication by the Members of the Department

#### a) Journal

- Ahmed, S., Habiba, M. U., Hossain, M. D., Hoque, S. M. and Rahman, M. M. (2022). Retardation of oxidative rancidity in ghee adding orange peel powder at different storage temperature. *Journal of Food Science and Technology*, 60 (1): 243-251 DOI: <https://doi.org/10.1007/s13197-022-05609-8>
- Alam, M. A., Hasan, M. T., Hossain, M. D., Ahemd, S., Hoque, S. A., Hossain, M. M. and Rahman, S. M. (2022). Meat processing and handling facilities in slaughterhouses of selected areas of Bangladesh. *Bangladesh Journal of Animal Science*, 51 (3): 115-21. DOI: <https://doi.org/10.3329/bjas.v51i3.61787>
- Islam, M. A., Haque, A. and Nishibori, M. (2022). Growth performance, meat yield and blood lipid profile of broiler and Sonali chickens. *Veterinary and Animal Science* 18: 100272 <https://doi.org/10.1016/j.vas.2022.100272>
- Islam, M. A., Das, N. C and Nishibori, M. (2022). Effect of extruded eggshell, limestone and oyster shell on egg production performance of laying hens. *Journal of Agricultural and Crop Research* 10 (3): 43-51. <http://sciencewebpublishing.net/jacr/archive/2022/June/pdf/Islam%20et%20al.pdf>

### Postgraduate Student's Information

Program	Number
MS in Dairy Science	03
PhD	-
Total =	03

**Courses Offered by the Department at Undergraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	DPS 201	Poultry Production and Management	II	3+1	Dr. Md. Morshedur Rahman Most. Khairunnesa Mst. Umme Habiba
	DPS 401	Breeder Farm Management and Hatchery Operation	IV	2+1.5	Dr. Md. Aminul Islam Shabbir Ahmed
Autumn	DPS 131	General Poultry Science	I	2+1	Dr. Md. Morshedur Rahman Mst. Umme Habiba
	DPS 331	Dairy and Poultry Products Technology	III	2+1.5	Dr. Md. Aminul Islam Shabbir Ahmed
Winter	DPS 161	General Dairy Science	I	2+1	Dr. Md. Morshedur Rahman Mst. Umme Habiba
	DPS 261	Dairy Animal Production and Management	II	2+1	Dr. Md. Aminul Islam Shabbir Ahmed

**Courses Offered by the Department at Postgraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	DPS 601	Dairy Animal Production	MS	3.0	Shabbir Ahmed
	DPS 605	Dairy Technology	MS	3.0	Dr. Md. Morshedur Rahman
	DPS 611	Dairy Farm Planning and Management	MS	3.0	Shabbir Ahmed
Autumn	DPS 631	Dairy Microbiology and Biotechnology	MS	3.0	Shabbir Ahmed
Winter	DPS 663	Techniques in Animal Food Research	MS	3.0	Dr. Md. Morshedur Rahman



# Department of Gynecology, Obstetrics & Reproductive Health

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## Faculty Members

### Professor

Dr. Abu Nasar Md. Aminoor Rahman

### Associate Professor

Dr. Ziban Chandra Das

Dr. Anup Kumar Talukder (Study leave)

Dr. M. Nazmul Hoque

## Officers and Staff

Name	Designation
Mst. Sabina Khatun	Administrative Officer
Md. Kuhetur Alam	Assistant Technical Officer

## MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Rifat Jahan Sumi (14-05-3376)	Effects of heat stress on fertility and reproductive health problems in dairy cows	Dr. Anup Kumar Talukder	Sum/22
Zannatara Moyna (15-05-3635)	Isolation and Whole Genome Sequencing of a <i>Klebsiella pneumoniae</i> isolate from the milk of bovine mastitis	Dr. Ziban Chandra Das	Win/22

## List of Research Project (Ongoing): Internal/External

Name the PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Abu Nasar Md. Aminoor Rahman Co-PI: DR. Md. Arman Sharif	Exploring the Status, Reproductive Behaviour and Health Management of Captive Common Peafowl ( <i>Pavo cristatus</i> ) in Bangladesh	MoST, GoB BDT 300000.00	
PI: Dr. Ziban Chandra Das Co-PI: DR. Kazi Khalid Ibne Khalil	Cryopreservation of immature and in vitro matured abattoir derived Black Bengal Goat oocytes by Solid Surface Vitrification	MoST, GoB BDT 250000.00	
PI: Dr. M. Nazmul Hoque Co-PI: DR. Md. Sayedul Islam	Molecular epidemiology, antimicrobial resistance and virulence potentials of <i>Streptococcus</i> spp. isolated from milk, feces and environment of mastitic dairy cows	MoST, GoB BDT 250000.00	
PI: Dr. M. Nazmul Hoque Co-PI: Dr. Ziban Chandra Das	Phenomic and genomic insights into the multi-drug resistant <i>Klebsiella pneumoniae</i> isolated from bovine clinical mastitis	UGC BDT 300000.00	
PI: Dr. M. Nazmul Co-PI: Dr. Ziban Chandra Das	Multiomics and probiotics approaches for biorational management and control of bovine mastitis	RMW, BSMRAU BDT 900000.00	

**List of Research Project (Completed): Internal/External**

Name the PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. Abu Nasar Md. Aminoor Rahman	Present status, reproductive performance and health management of Turkey ( <i>Meleagris galopavo</i> ) breeds/ varieties under farming systems in Bangladesh (First year)	MoST, GoB BDT 300000.00	Completed in June 2022
Dr. Ziban Chandra Das	Early pregnancy diagnosis by means of ultrasonography to improve the reproductive performances in Black Bengal Goat	MoST, GoB BDT 200000.00	Completed in June 2022
Dr. Anup Kumar Talukder	Exfoliative cervico-vaginal cytology for monitoring the resumption of ovarian cyclicity and reproductive health during postpartum period in Black Bengal Goat	MoST, GoB BDT 250000.00	Completed in June 2022
Dr. M. Nazmul Hoque	Comparative genomic analysis of <i>Staphylococcus aureus</i> from clinical versus subclinical mastitis of dairy cows	MoST, GoB BDT 200000.00	Completed in June 2022

**List of Seminar/Workshop/Training Attended (Local and foreign)**

Name	Program attended	Date	Country	Role / contribution in the program
2 <sup>nd</sup> International Conference on Genomics, Nanotech and Bioengineering	M. Nazmul Hoque	June 26-28, 2022	Bangladesh	Presenter
ASM Microbe 2022	M. Nazmul Hoque	June 09-13, 2022	USA	Presenter
5th Young Scientist Congress 2022	M. Nazmul Hoque	25-27 November, 2022	Bangladesh	Presenter

**Administrative Duties by the Departmental Members (if any with tenure)**

Name	Position & Address	Duration
01. Prof. Dr. Abu Nasar Md. Aminoor Rahman	Library Chief, BSMRAU	From Sep. 2021 to date.
	Chairman of Editorial Board, BSMRAU News Letter (e:kgyiK...we evZ@v)	From 2012 to date
02. Dr. Ziban Chandra Das	Head, Department of Gynecology, Obstetrics & Reproductive Health	From July 2020 to July 2022.
	Associate Director, Project Research, Research Management Wing (RMW), BSMRAU	From October 2022 to date.
03. Dr. Anup Kumar Talukder	Associate Director, Veterinary Teaching Hospital (VTH), BSMRAU	From July 2021 to October 2022.
04. Dr. M. Nazmul Hoque	Specialist Veterinarian (Gynecology), Veterinary Teaching Hospital (VTH), BSMRAU	From July 2021 to date
	Head, Department of Gynecology, Obstetrics & Reproductive Health	From July 2022 to date.





## List of Publication by the Members of the Department

### a) Journal

- Al Amin, M, Pasha, M. H., Hoque, M. N., Siddiki, A. M. A. M. Z., Saha, S., & Kamal, M. M. (2022). Methodology for laboratory-based antimicrobial resistance surveillance in animals. *Vet. World.*, 15(4), 1066-1079. doi: [www.doi.org/10.14202/vetworld.2022.1066-1079](http://www.doi.org/10.14202/vetworld.2022.1066-1079).
- Alam, S., Islam, M. T., Das, Z. C., Hossain, M. I., & Haider, M. G. (2022). Pathological investigation of Reproductive diseases of doe in Gazipur district. *Ecol. J.*, 4(1), 19-28.
- Chowdhury, D., Talukder, A. K., Rahman, A. N. M. A., Hoque, M. N., & Das, Z. C. (2022). Ultrasonographic Diagnosis of Early Pregnancy in Black Bengal Goat. *Ecol. J.*, 4(1), 9-18.
- Hasan, M. M., Hoque, M. N., Ahmed, F., Haque, M., Sultana, M., & Hossain, M. A. (2022). Circulating Phylotypes of White Spot Syndrome Virus in Bangladesh and Their Virulence. *Microorganisms*, 10(1), 191.
- Hasan, M.M., Hoque, M. N., Hasan, M. R., Asaduzzaman, M., & F. M. Juliana. (2022). Rab7 Investigation Insights into the Existence of White Spot Syndrome Virus in Crustaceans: An In Silico Approach. *Adv. Virol.*, 3887441. <https://doi.org/10.1155/2022/3887441>
- Hoque, M. N., Faisal, G. M., Chowdhury, F. R., Haque, A., & Islam, T. (2022). The urgency of wider adoption of one health approach for the prevention of a future pandemic. *Int. J. One Health*, 8(1), 20-33. doi: 10.14202/IJOH.2022.20-33.
- Hoque, M. N., Jahan, M. I., Hossain, M. A., & Sultana, M. (2022). Genomic diversity and molecular epidemiology of a multidrug resistant *Pseudomonas aeruginosa* DMC30b isolated from hospitalized burn patient in Bangladesh. *J. Global Antimicrob. Resist.*, 31, 110-118 <https://doi.org/10.1016/j.jgar.2022.08.023>
- Hoque, M. N., Rahman, M. S., & Islam, T. et al. (2022). Induction of mastitis by cow-to-mouse fecal and milk microbiota transplantation causes microbiome dysbiosis and genomic functional perturbation in mice. *Animal Microbiome*, 4, 43. <https://doi.org/10.1186/s42523-022-00193-w>
- Hoque, M. N., Sarkar, M. H., Khan, M. A., Hossain, M. A., Hasan, M. I., ... & Islam T. (2022). Differential gene expression profiling reveals potential biomarkers and pharmacological compounds against SARS-CoV-2: insights from machine learning and bioinformatics approaches. *Front. Immunol.*, 3875. <https://doi.org/10.3389/fimmu.2022.918692>
- Hoque, M. N., Talukder, A. K., Saha, O., Hasan, M.M., Rahman, A. N. M. A., & Das, Z. C. (2022). Antibigram and virulence profiling reveals multidrug resistant *Staphylococcus aureus* as the predominant aetiology of subclinical mastitis in riverine buffaloes. *Vet. Med. Sci.*, 1–15. <https://doi.org/10.1002/vms3.942>
- Hossain, M. I., Alam, S., Islam, M.T., Rahman, A. N. M. A., & Haider, M. G. (2022). Pathological study of bacterial diseases of liver of cattle. Bangladesh. *Ecol. J.*, 4(2), 61-69.
- Ievy, S., Hoque, M. N., Islam, M. S., Sobur, M. A., Ballah, F. M., Rahman, M. S., Rahman, M. B., Hassan, J., Khan, M. F., & Rahman, M. T. (2022). Genomic characteristics, virulence and antimicrobial resistance in avian pathogenic *Escherichia coli* MTR\_BAU02 strain isolated from layer farms in Bangladesh. *J. Glob. Antimicrob. Resist.*, 30, 155-162. <https://doi.org/10.1016/j.jgar.2022.06.001>.
- Islam, M. A., Ahammed, T., Noor, S. T. A., Hasan, M. N., Hoque, M. N., ..... & Bhattacharya, P. (2022). An Estimation of Five-decade Long Monkeypox Case Fatality Rate: Systematic Review and Meta-analysis. *J. Pure Appl. Microbiol.*, 8369. doi: 10.22207/JPAM.16.SPL1.16.
- Islam, M. A., Sumon, S. M. M. R., Rahman, A. N. M. A., Khatun, F. (2022). Efficacy of locally available anthelmintics against helminths of dairy cows in Gazipur, Bangladesh. *Adv. Anim. Vet. Sci.*, 10(12), 2630-2640.



- Islam, S.M. R., Foysal, M., Hoque, M. N., Mehedi, H. M., Rob, M., Salauddin, A., Tanzina, A. Y., .... & A. Tay, A. (2022). Dysbiosis of oral and gut microbiomes in SARS-CoV-2 infected patients in Bangladesh: elucidating the role of opportunistic gut microbes. *Front. Med.*, 9, 163, <https://doi.org/10.3389/fmed.2022.821777>
- Islam, T., Afroz, N., Koh, C., Hoque, M. N., Rahman, M. J., Gupta, D. R., Mahmud, N. U., Al Nahid, A., Islam, R., Bhowmik, P. K., & Sharpe, A.G. (2022). Whole-genome sequencing of a year-round fruiting jackfruit (*Artocarpus heterophyllus* Lam.) reveals high levels of single nucleotide variation. *Front. in Plant Sci.*, 13, doi: 10.3389/fpls.2022.1044420
- Khan, M., Khan, M. A. M., Mahfuz, A. M. U. B., Sanjana, J. M., Ahsan, A., Gupta, D. R., Hoque, M. N., & Islam, T. (2022). Highly potent natural fungicides identified in silico against the cereal killer fungus *Magnaporthe oryzae*. *Sci. Rep.*, 12(1), 1-16. <https://doi.org/10.1038/s41598-022-22217-w>.
- Meher, M. M., Afrin, M., Talukder, A. K., & Haider, M. G. (2022). Knowledge, attitudes and practices (KAP) of street food vendors on food safety in selected areas of Bangladesh <https://doi.org/10.1016/j.heliyon.2022.e12166>
- Naser, I. B., Mahmud, N. U., Sarker, A., Hoque, M. N., & Islam, T. (2022). A Highly Salt-Tolerant Bacterium *Brevibacterium sediminis* Promotes the Growth of Rice (*Oryza sativa* L.) Seedlings. *Stresses*, 2(3), 275-289. <https://doi.org/10.3390/stresses2030020>
- Sumi, R. J., Hoque, M. N., Talukder, A. K., Islam, M. T., Rahman, A. N. M. A., & Das, Z. C. (2022). Heat stress effects on fertility and reproductive health problems of dairy cows in a selected area of Bangladesh. *J. Anim. Reprod. Biotech.*, 37, 266-275.
- Tanzina, A.Y., Hoque, M. N., Mannan, A., & Foysal, M. J. et al. (2022). Investigating the nutritional profile and bacteriome diversity in Bangladeshi sour yogurt. *Biocatal. Agric. Biotechnol.*, 102451. <https://doi.org/10.1016/j.bcab.2022.102451>.

### Postgraduate Student's Information

Program	Number
MS	11
PhD	-
Total =	11

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GOR 401	Gynecology & Reproductive Biotechnology	IV	3.0+1.5	Dr. Abu Nasar Md. Aminoor Rahman Dr. Ziban Chandra Das
	GOR 501	Theriogenology (Clinics)	V	0+2.0	Dr. Anup Kumar Talukder Dr. M. Nazmul Hoque
Autumn	GOR 431	Andrology & Artificial Insemination	IV	2.0+1.5	Dr. Ziban Chandra Das Dr. M. Nazmul Hoque
Winter	GOR 461	Reproductive Immunology & Obstetrics	IV	3.0+1.5	Dr. Anup Kumar Talukder Dr. M. Nazmul Hoque
	GOR 462	Theriogenology of Wildlife, Zoo, Aquatic & Companion Animals	IV	2.0+1.5	Dr. Abu Nasar Md. Aminoor Rahman Dr. Ziban Chandra Das



### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	GOR 601	General Gynecology & Female Infertility	MS	3.0	Dr. Ziban Chandra Das Dr. M Nazmul Hoque
	GOR 606	Reproductive Health Management of farm Animal	MS	3.0	Dr. Ziban Chandra Das
	GOR 621	Neonatology & Pediatrics	MS	3.0	Dr. Abu Nasar Md. Aminoor Rahman
Autumn	GOR 602	Andrology & Male Infertility	MS	3.0	Dr. Ziban Chandra Das Dr. M Nazmul Hoque
	GOR 641	Theriogenology of Pet, Zoo, Aquatic & Laboratory Animals	MS	3.0	Dr. Abu Nasar Md. Aminoor Rahman
	GOR 610	Reproductive Endocrinology	MS	3.0	Dr. Abu Nasar Md. Aminoor Rahman
Winter	GOR 603	Veterinary Obstetrics	MS	3.0	Dr. Ziban Chandra Das Dr. M. Nazmul Hoque
	GOR 620	Reproductive Surgery	MS	3.0	Dr. Ziban Chandra Das Dr. M. Nazmul Hoque
	GOR 640	Wildlife Reproduction & Conservation Biology	MS	3.0	Dr. Abu Nasar Md. Aminoor Rahman



## Department of Medicine

[www.bsmrau.edu.bd/med/](http://www.bsmrau.edu.bd/med/)

### Faculty Members

#### Associate Professor

Dr. Md. Aminul Islam

#### Assistant Professor

DR. S. H. M. Faruk Siddiki

Dr. Md. Robiul Karim

DR. S. M. Mostafizur Rahaman (Study leave from January 2022)

### Officers and Staff

Name	Designation
Kaniz Fatema	Laboratory Technician
Rifat Ahmed	MLSS

### List of Research Project (Ongoing): Internal/External

Name the PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Md. Robiul Karim	Molecular characterization of Newcastle disease virus (NDV) in-search for an avirulent virus for the development of a thermostable vaccine	KGF BDT 2000000.00 (BSMRAU Component) (Total=12000000.00)	2020
PI: Dr. Md. Robiul Karim Co-PI: Dr. AMAM Zonaed Siddiki (CVASU)	Epidemiology and molecular characterization of important intestinal zoonotic protozoan parasites in domestic pigs and their handlers in Rangamati Hill District	RMW, BSMRAU 1000000.00	2021
PI: Dr. Md Robiul Karim Co-PI: DR. S.H.M. Faruk Siddiki	Assessing the zoonotic potential and epidemiological risk factors of Blastocystis infection in smallholder dairy cattle in Bangladesh	MoST, GoB BDT 250000.00	2022
PI: Dr. Md Robiul Karim Co-PI: DR. S.H.M. Faruk Siddiki	Antibody detection and molecular characterization of Toxoplasma gondii from domestic cats ( <i>Felis catus</i> ) in Dhaka city	UGC BDT 300000.00	2022
PI: Dr. Md. Aminul Islam Co-PI: Dr. Md. Robiul Islam	Factors influencing pathogenic bacteria in poultry manure	RMW, BSMRAU BDT 1000000.00	2021
PI: Dr. Md. Aminul Islam Co-PI: Dr. Md. Sodrul Islam	Identifying the methods for the reduced spread of antibiotic-resistant genes from dairy wastes to the surrounding surface water and groundwater for human consumption	MoST, GoB BDT 250000.00	2022



### List of Research Project (Completed): Internal/External

Sl. No.	Name the PI	Title of the Project	Funding Source with Budget	Completion Year
1.	Dr. Md. Aminul Islam & Dr. Md. Sodrul Islam	Elucidating the methods for reduced dissemination of bacteria from dairy wastes to the environment	MoST, GoB BDT 200000.00	2022
2.	Dr. Md Robiul Karim & DR. S.H.M. Faruk Siddiki	Investigation of infection status and genetic diversity of Blastocystis in cattle in Bangladesh	MoST, GoB BDT 200000.00	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md Robiul Karim	5 <sup>th</sup> WVPA Meeting 2022	22-23 October, 2022	Bangladesh	Participant
Dr. Md Robiul Karim	Zoonotic Disease Prioritization Workshop	28-29 November, 2022	Bangladesh	Expert
DR. S. H. M. Faruk Siddiki	Training on Statistical Data Analysis	27-28 November, 2022	Bangladesh	Participation
Dr. Md. Aminul Islam	International Conference on Environmental Protection for Sustainable Development (ICEPSD)-2022	02-04 September, 2022	Bangladesh	Oral Presenter

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Aminul Islam	Head, Department of Medicine, BSMRAU	September, 2020 to date
	Veterinarian (Medicine), Veterinary Teaching Hospital, BSMRAU	August, 2021 to date
DR. S. H. M. Faruk Siddiki	Veterinarian (Medicine), Veterinary Teaching Hospital, BSMRAU	August, 2021 to date

### List of Publication by the Members of the Department

#### a) Journal

- Badri, M., Olfatifar, M., Karim, M. R., Modirian, E., Houshmand, E., Abdoli, A., Nikoonejad, A., Sotoodeh, S., Zargar, A., Samimi, R., & Hashemipour, S. (2022). Global prevalence of intestinal protozoan contamination in vegetables and fruits: A systematic review and meta-analysis. *Food Control.*, 133, 108656.
- Eslahi, A. V., KarimiPourSaryazdi, A., Olfatifar, M., deCarvalho, L. M. M., Foroutan, M., Karim, M. R., Badri, M., & Ketzis, J. K. (2022). Global prevalence of Trichinella in pigs: A systematic review and meta-analysis. *Vet. Med. Sci.*, 8(6), 2466-2481.
- Eslahi, A. V., Olfatifar, M., Karim, M. R., AbuOdeh, R., Modirian, E., Houshmand, E., Abdoli, A., Samimi, R., Sotoodeh, S., Mahmoudi, R., Hajjalilo, E., Hashemipour, S., & Badri, M. (2022). Global incidence of helminthic contamination of vegetables, cucurbits and fruits: A systematic review and meta-analysis. *Food Control.*, 133, 108582.



- Islam, M. A., Ikeguchi, A., & Naide, T. (2022). Effectiveness of an air cleaner device in reducing aerosol numbers and airborne bacteria from an enclosed type dairy barn. *Environ. Sci. Pollut. Res.*, 29, 53022–53035.
- Islam, M. A., Sumon, S. M. M. R., Rahman, A. N. M. A., & Khatun, F. (2022). Efficacy of locally available anthelmintics against helminths of dairy cows in Gazipur, Bangladesh. *Adv. Anim. Vet. Sci.*, 10 (12), 2630-2640.
- Karim, M. R., Rume, F. I., Li, D., Li, J., & Zhang, L. (2022). First molecular characterization of *Enterocytozoon bieneusi* in children and calves in Bangladesh. *Transbound. Emerg. Dis.*, 69(4), 1999-2007.
- Li, J., Xu, F., Karim, M. R., & Zhang, L. (2022). Review on Cyclosporiasis Outbreaks and Potential Molecular Markers for Tracing Back Investigations. *Foodborne Pathog. Dis.*, 19(12), 1-10.
- Solaiman, M., Bijoy, M. M. K., Harun, A. B., Pranto, R. K., & Karim, M. K. (2022). Prevalence of peste des petits ruminants (PPR) in goats at Keraniganj Upazila of Dhaka district, Bangladesh. *BJVAS.*, 10(1), 65-70.
- Uddin, A. H. M. M., Hasan, T., Hossain, D., Nahar, K., Islam, T., Islam, M. T., Saraf, M. S. H., Karim, M. R., Atikuzzaman, M., & Ahsan, M. I. (2022). First report of knowledge and practices towards toxoplasmosis among the cat owners: A cross-sectional survey in Bangladesh. *Zoonoses Public Health.*, 00, 1–12. <https://doi.org/10.1111/zph.13012>.

#### b) Book/Book Chapter

- Karim, M. R., Hossain, D., Uddin, A. H. M. M., & Rume, F. I. (2022). Role of macrophages in tumor development. In: Cho JY (Eds.). *Recent Advancements in Microbial Diversity: Macrophages and Their role in Inflammation*. Academic Press: Elsevier Publishing. pp. 113-164.

#### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	MED 401	Farm Animal Medicine	4	3+1.5	Dr. Md. Aminul Islam Dr. Md. Robiul Karim
	MED 501	Metabolic & Nutritional Diseases of Farm Animals	5	2+0	DR. S. H. M. Faruk Siddiki Dr. Md. Robiul Karim
	MED 502	Forensic Medicine, Jurisprudence, and Animal Welfare	5	3+0	DR. S. H. M. Faruk Siddiki Dr. Md. Robiul Karim
	MED 503	Medicine (Clinics)	5	0+2	Dr. Md. Aminul Islam DR. S. H. M. Faruk Siddiki
Autumn	MED 431	Epidemiology & Preventive Medicine	4	3+1.5	DR. S. H. M. Faruk Siddiki Dr. Md. Robiul Karim
	MED 432	Avian Medicine	4	3+1.5	Dr. Md. Aminul Islam DR. S. H. M. Faruk Siddiki
Winter	INT 561	Internship Program-II [On Farm Clinical Practices]	5		Dr. Md. Aminul Islam
	MED 361	General Medicine	3	3+1.5	Dr. Md. Aminul Islam DR. S. H. M. Faruk Siddiki
	MED 461	Wildlife, Zoo, Aquatic and Companion Animal Medicine	4	3+1.5	Dr. Md. Aminul Islam Dr. Md. Robiul Karim



## Department of Microbiology and Public Health

www.bsmrau.edu.bd/mph

### Faculty Members

#### Associate Professor

Dr. Mohammad Ali Zinnah

#### Assistant Professor

DR. Mueena Jahan (Study leave)

DR. Mirza Mienur Meher (Study leave)

DR. Md. Sayedul Islam

### Officers and Staff

Name	Designation
Md. Amir Hossain	Administrative Officer
Afzal Hossain	Lab Assistant

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Mohammad Ali Zinnah Co-PI: DR. Md. Sayedul Islam	Isolation and characterization of Escherichia Coli from backyard poultry and human and their potential implication zoonoses	RMW, BSMRAU BDT 900000.00	2022- 2025
PI: DR. Md. Sayedul Islam	Determination of biofilm formation ability among multidrug resistant staphylococcus aureus isolated from Cats	BZMRAU Innovation Fund BDT 100000.00	2022- 2023

### List of Seminar/Workshop/Training attended (Local and Foreign):

Name of Teacher/Officer	Program attended	Date	Country	Role/contribution in the program
Dr. Mohammad Ali Zinnah	Participated on the workshop, "Safe livestock food production in Bangladesh: status and way forward".	27/02/2022	Bangladesh (Venue: BARC, Farmgate, Dhaka.)	Attended
Dr. Mohammad Ali Zinnah	Participated on the workshop, "4 <sup>th</sup> IR: Challenges and future perspectives".	13/03/2022	Bangladesh (Venue: BAU, Mymensingh.)	Attended
Dr. Mohammad Ali Zinnah	Joined as an expert to prepare questions for written examinations for the position of non-cadre organized by BPSC, Dhaka.	18/01/2022	Bangladesh (Venue: BPSC, Dhaka.)	Attended
Dr. Mohammad Ali Zinnah	Joined on the 5 <sup>th</sup> meeting of the AMR Sectoral Working Group for Animal Health.	29/06/2022	Bangladesh (Venue: DLS, Dhaka.)	Attended



DR. Md. Sayedul Islam	Pedagogy Module development planning	23/11/22	Bangladesh (Venue: Nescent Garden Baridhara Dhaka )	Attended
DR. Md. Sayedul Islam	CEVETBD workshop	18-22 Nov 2022	Bangladesh (Royal tulip beach resort, Cox's Bazar)	Attended

### Administrative Duties by the Departmental Members (if any with tenure):

Name	Position & Address	Duration
Dr. Mohammad Ali Zinnah	Associate Director Student Welfare BSMRAU	30/09/2021 to till date
DR. Md. Sayedul Islam	Assistant Provost, Shaheed Ahsanullah Master Hall, BSMRAU	01/05/2021 to till date

### List of Publication by the Members of the Department

#### a) Journal

- Islam, M. T., Meher, M. M., Harun, A. B., & Haider, M. G. (2022). The common respiratory diseases of poultry in Bangladesh: present status and future directions. *Vetreinary sciences: Research and Reviews*, 8(1), 52-64.
- Kabir, M. R., Halima, O., Rahman, N., Ghosh, S., Islam, M. S., & Rahman, H. (2022). Linking farm production diversity to household dietary diversity controlling market access and agricultural technology usage: evidence from Noakhali district, Bangladesh. *Heliyon*, 8(1), 08755.
- Meher, M. M., Afrin, M., Talukder, A. K., & Haider, M. G. (2022). Knowledge, attitudes and practices (KAP) of street food vendors on food safety in selected areas of Bangladesh <https://doi.org/10.1016/j.heliyon.2022.e12166>
- Meher, M. M., Islam, M. T., Gupta, D. R., & Haider, M. G. (2022). Detection of maternally derived antibodies (mda) titer and comparison of intermediate and intermediate plus (gm-97 strain) vaccines of infectious bursal disease virus. *Journal of Microbiology, Biotechnology and Food Science.*, <https://doi.org/10.55251/jmbfs.5844>
- Meher, M. M., Sharif, M. A., & Bayazid, A. A. (2022). Seroprevalence of Salmonella spp. Infection in Different Types of Poultry and Biosecurity Measures Associated with Salmonellosis. *Int. J. Agric. Env. Food Sci.*, 6(4), 557-567.

### Postgraduate Student's Information

Program	Number
MS	2
PhD	0
Total =	2





### Courses offered by the Department at Undergraduate Level

Term	Course code	Title of the Course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	MPH 101	Animal Hygiene & Biosecurity	I	3.0	DR. Mirza Mienur Meher DR. Sayedul Islam
	MPH-301	Immunology, Serology and Molecular Techniques	III	3.0	Dr. Mohammad Ali Zinnah DR. Mirza Mienur Meher
	MPH-501	Public Health and Zoonoses	V	2.0	Dr. Mohammad Ali Zinnah DR. Sayedul Islam
Autumn	MPH-231	Systemic Bacteriology and Mycology	II	4.0	Dr. Mohammad Ali Zinnah DR. Mirza Mienur Meher
	MPH-431	Dairy Microbiology & Food Hygiene	IV	4.0	DR. Mirza Mienur Meher DR. Sayedul Islam
Winter	MPH-161	General Microbiology	I	4.0	Dr. Mohammad Ali Zinnah DR. Sayedul Islam
	MPH-261	Virology	II	4.0	Dr. Mohammad Ali Zinnah DR. Mirza Mienur Meher

### Courses offered by the Department at Postgraduate Level

Term	Course code	Title of the Course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Autumn	MPH-604	Advance Virology	MS	3.0	Dr. Mohammad Ali Zinnah
	MPH-601	Advance Bacteriology	MS	3.0	DR. Md. Sayedul Islam



## Department of Pathobiology

[www.bsmrau.edu.bd](http://www.bsmrau.edu.bd)

### Faculty Members

#### Professor

Dr. Md. Golam Haider

#### Associate Professor

Dr. Md. Taimur Islam

Dr. Fahima Khatun

#### Assistant Professor

DR. Sheikh Arafatur Rahman

DR. Afroja Yasmin

### Officers and Staff

Name	Designation
Md. Rafiqul Islam	Technical Officer

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Md. Jan Sharif (15-05-3343)		Dr. Md. Golam Haider	Aut/22

### List of Research Project (ongoing): Internal/External

Name of the Principal Investigator	Title of the Project	Funding Source	Starting Year
Dr. Md. Taimur Islam	Seroprevalence and molecular characterization of lumpy skin disease virus (LSDV) in cattle: a potential implication for isolation of vaccine strain in Bangladesh	BANBEIS, MoE BDT 2000000.00	July, 2021
Dr. Md. Taimur Islam	Elucidating the effects of formalin as food preservative on the hematological profile, histoarchitecture of vital organs and fertility of male Swiss albino mice	MoST, GoB BDT 450000.00	July, 2022
Dr. Fahima Khatun	Morphological and molecular characterization gastrointestinal nematode of indigenous chicken in Gazipur district.	RMW, BSMRAU BDT 900000.00	July, 2022
DR. Sheikh Arafatur Rahman	Determination of nematode parasitic larval load in the pasture and formulation of control measures in Gazipur district, Bangladesh	RMW, BSMRAU BDT 750000.00	July, 2021



### List of Research Project (Completed): Internal/External

Name of the Principal Investigator	Title of the Project	Funding Source	Completion Year
Dr. Md. Golam Haider	Pathological investigation of adenovirus infections in chickens of Bangladesh.	MoST, GoB BDT 200000.00	30 June, 2022
Dr. Md. Taimur Islam	Seromonitoring and establishing molecular detection method of LSDV from LSD infection in Gazipur district in Bangladesh	MoST, GoB BDT 200000.00	30 June, 2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name of the Teacher	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Golam Haider	The role of industrial revolution technologies in enhancing inclusion in the livestock sector and expanding livestock insurance	18 <sup>th</sup> -21 <sup>th</sup> September 2022	Hotel Inter Continental Dhaka, Bangladesh	Participant
Dr. Md. Golam Haider	ACI-Ceva Poultry Innovation Summit 2022	18 <sup>th</sup> -21 <sup>th</sup> October 2022	Sea Pearl Resort, Jaliapalong, Cox's Bazar, Bangladesh	Participant
Dr. Md. Golam Haider	5 <sup>th</sup> WVPA Asia Meeting 2022	22 <sup>th</sup> -23 <sup>th</sup> October 2022	Hotel Radison Blu, Dhaka, Bangladesh	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Golam Haider	Director, VTH	01-07-2021 to date
Dr. Md. Golam Haider	Dean, FVMAS	15-12-2021 to date
Dr. Md. Taimur Islam	Provost, Shaheed Ahsanullah Master Hall, BSMRAU	08/07/2021 to date
Dr. Fahima Khatun	Assistant Provost, Ila Mitro Hall	01-08-2021 to date
Dr. Fahima Khatun	Head, PBL	17-07-2022 to date
DR. Sheikh Arafatur Rahman	Pathologist, VTH	01/08/2021 to date

### List of Publication by the Members of the Department

#### a) Journal

- Islam, M. A., Sumon, S. M. M. R., Rahman, A. N. M. A., Khatun, F. (2022). Efficacy of locally available anthelmintics against helminths of dairy cows in Gazipur, Bangladesh. *Adv. Anim. Vet. Sci.*, 10(12), 2630-2640. doi: <http://dx.doi.org/10.17582/journal.aavs/2022/10.12.2630.2640>
- Chowdhury, D., Talukder, A. K., Rahman, A. N. M. A., Hoque, M. N., & Das, Z. C. (2022). Ultrasonographic Diagnosis of Early Pregnancy in Black Bengal Goat. *Ecol. J.*, 4(1), 9-18.
- Alam, S., Islam, M. T., Das, Z. C., Hossain, M. I., Hossain, M. G., & Haider, M. G. (2022). Pathological investigation of reproductive diseases of doe in Gazipur district, Bangladesh. *Ecol. J.*, 4(1), 19-28.
- Rahman, M. A., Rahman, M. T., Saha, M., Sadi, R. S., Labib, M. T. R., Hasan, M. F., Haider, M. G., Rahman,



- M. M., & Alam, M. S. (2022). A case Report om Euthanasia of a Rescued Horse Using Xylaxine Hydrochloride and Thiopental Sodium. *A Research in Agriculture, Livestock and Fisheries*, 9(2), 213-219.
- Meher, M. M., Islam, M. T., Gupta, D. R., & Haider, M. G. (2022). Detection of maternally derived antibodies (mda) titer and comparison of intermediate and intermediate plus (gm-97 strain) vaccines of infectious bursal disease virus. *Journal of Microbiology, Biotechnology and Food Science.*, <https://doi.org/10.55251/jmbfs.5844>
- Meher, M. M., Afrin, M., Talukder, A. K., & Haider, M. G. (2022). Knowledge, attitudes and practices (KAP) of street food vendors on food safety in selected areas of Bangladesh <https://doi.org/10.1016/j.heliyon.2022.e12166>
- Meher, M. M., Hossain, M., & Haider, M. G. (2022). Detection of MDA titer of infectious bronchitis virus and comparison of antibody titer produced by two different infectious bronchitis vaccine. *Poultry Studies*, 19 (2), 44 - 51 .
- Hossain, M. I., Alam, S., Islam, M.T., Rahman, A. N. M. A., & Haider, M. G. (2022). Pathological study of bacterial diseases of liver of cattle. Bangladesh. *Ecol. J.*, 4(2), 61-69.
- Islam, M. T., Meher, M. M., Harun, A. B., & Haider, M. G. (2022). The common respiratory diseases of poultry in Bangladesh: Present status and future directions. *Veterinary Sciences: Research and Reviews*, 8, 52-64.
- Islam, M. T., Meher, M. M., Harun, A. B., & Haider, M. G. (2022). The common respiratory diseases of poultry in Bangladesh: present status and future directions. *Vetreinary sciences: Research and Reviews*, 8(1), 52-64.

### Postgraduate Student's Information

Program	Number
MS	22
PhD	-
Total =	22

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor (s)
<b>Year 2022</b>					
Summer	PBL 201	General Parasitology & Entomology	II	3+1.5	Dr. Fahima Khatun DR. Sheikh Arafatur Rahman
	PBL 302	Systemic Pathology & Oncology	III	3+1.5	Prof. Dr. Md. Golam Haider Dr. Md. Taimur Islam
	PBL 501	Clinical Pathology & Necropsy	V	0+2	Dr. Md. Taimur Islam DR. Afroja Yasmin
	PBL 301	Protozoology	III	3+1.5	Dr. Fahima Khatun DR. Sheikh Arafatur Rahman
Autumn	PBL 231	General & Nutritional Pathology	II	3+1.5	Prof. Dr. Md. Golam Haider Dr. Md. Taimur Islam
	PBL 331	Pathology of Infectious Diseases	III	3+0	Dr. Md. Taimur Islam DR. Afroja Yasmin



Winter	PBL 261	Helminthology & Malacology	II	3+1.5	Dr. Fahima Khatun DR. Sheikh Arafatur Rahman
	PBL 361	Avian Pathology	III	3+1.5	Dr. Md. Golam Haider Dr. Md. Taimur Islam

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	PBL-601	General Pathology	MS	3.0	Dr. Md. Taimur Islam
	PBL-604	Avian Pathology	MS	3.0	Dr. Md. Golam Haider
Autumn	PBL-614	Clinical Pathology	MS	3.0	Dr. Md. Taimur Islam
	PBL-622	Wildlife Pathology	MS	3.0	Dr. Md. Golam Haider
Winter	PBL-632	Reproductive Pathology	MS	3.0	Dr. Md. Taimur Islam
	PBL-653	Pathology of Emerging and Transboundary Diseases	MS	3.0	Dr. Md. Golam Haider



## Department of Physiology and Pharmacology

[www.bsmrau.edu.bd/php/](http://www.bsmrau.edu.bd/php/)

### Faculty Members

#### Associate Professor

Dr. Md. Mizanur Rahman

Dr. Md. Sodrul Islam

#### Assistant Professor

DR. Md. Shohidul Islam

#### Lecturer

DR. Kazi Khalid Ibne Khalil

### Officers and Staff

Name	Designation
Aklema Akter	Assistant Technical Officer
Saidul Islam	Office Assistant Cum Computer Operator

### List of Research Project (Ongoing): Internal/External

Name the PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Md. Mizanur Rahman DR. Md Shahidul Islam	Infarct size limiting effect of cardiac tonic extracted from native herb in mouse with experimental myocardial infarction model	MoST, GoB BDT 200000.00	2022
DR. Kazi Khalid Ibne Khalil DR. Md Shahidul Islam	Comparative study of commercial vitamin C, Amla fruit ( <i>Emblica officinalis</i> ) and Aloe vera ( <i>Aloe barbadensis</i> Miller) on ameliorating effects of heat stress in broiler	RMW, BSMRAU BDT 100000.00	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name of the Teacher	Program attended	Date	Country	Role / contribution in the program
DR. Md Shahidul Islam	Statistical Data Analysis	27/11/2022 to 28/11/2022	Bangladesh	Trainee
DR. Kazi Khalid Ibne Khalil	Statistical Data Analysis	27/11/2022 to 28/11/2022	Bangladesh	Trainee
	Scientific Writing	13/02/2022 to 17/02/2022	Bangladesh	Trainee

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Sodrul Islam	Head	25 March 2022 (10 months)



## List of Publication by the Members of the Department

### a) Journal

- Chowdhury, D., Talukder, A. K., Rahman, A. N. M. A., Hoque, M. N., & Das, Z. C. (2022). Ultrasonographic Diagnosis of Early Pregnancy in Black Bengal Goat. *Ecol. J.*, 4(1), 9-18.
- Dipto Chowdhury, Anup Kumar Talukder, Abu Nasar Md. Aminoor Rahman, Md. Golam Haider, Kazi Khalid Ibne Khalil, M. Nazmul Hoque and Ziban Chandra Das (2022). Ultrasonographic Diagnosis of Early Pregnancy in Black Bengal Goat. *Ecol. J.* 4(1): 9-18
- Hossain M. J., Islam, M. S. D., & Rahman, M. (2022). Comparative Efficacy of Different Anthelmintics in Treatment of Swamp Buffalo Naturally Infected with Gastro-Intestinal Parasites. *South Asian Journal of Parasitology*, 6(4), 123-129.
- Jannat Hossain M, Islam MSD, Rahman M. (2022). Comparative Efficacy of Different Anthelmintics in Treatment of Swamp Buffalo Naturally Infected with Gastro-Intestinal Parasites. *South Asian Journal of Parasitology*. 21; 6(4):123-9.
- Mamun, M. A., Rahman, M. M., Paul, B., Akter, T., Aktaruzzaman, M., & Islam M. S. D. (2022). Antibiotic susceptibility profile and resistance patterns of *Escherichia coli* strain to colistin isolated from Chicken meat (Broiler, Layer & Sonali) at Sylhet division of Bangladesh. *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)*, 15, 01-05
- Rahman, M. A., Rahman, M. T., Saha, M., Sadi, R. S., Labib, M. T. R., Hasan, M. F., Haider, M. G., Rahman, M. M. & Alam, M.S. (2022). A Case Report on Euthanasia of a Rescued Horse Using Xylazine Hydrochloride and Thiopental Sodium. *Research in Agriculture Livestock and Fisheries*, 9(2), 213-219.
- Sarker, M. S., Rafiq, K., Rahman, M. M., Khalil, K. K., Islam M. S., & Islam M. S. (2022). Effects of *Spirulina* (*Spirulina platensis*) on production, hematological parameters and lipid profile in layers. *Research in Agriculture Livestock and Fisheries*, 9(1), 49-55.

## Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer/2021	PHP 201	Systemic Physiology	2	3+1	DR. Md Shahidul Islam DR. Kazi Khalid Ibne Khalil
	PHP 301	Systemic Pharmacology	3	3+0	Dr. Md. Mizanur Rahman Dr. Md. Sodrul Islam
	PHP 501	Clinical Pharmacology & Pharmacy	5	0+2	Dr. Md. Mizanur Rahman Dr. Md. Sodrul Islam
	GEU 101	Communicative English	1	0+2	Dr. ANM Aminoor Rahman Dr. Md. Mizanur Rahman
Autumn/2021	PHP 231	Nutritional Physiology	2	2+0	DR. Md Shahidul Islam DR. Kazi Khalid Ibne Khalil
	PHP 331	Toxicology	3	3+1	Dr. Md. Mizanur Rahman Dr. Md. Sodrul Islam
Winter/2021	PHP 161	General Physiology	1	3+1	DR. Md Shahidul Islam DR. Kazi Khalid Ibne Khalil
	PHP 261	General Pharmacology & Therapeutics	2	3+1	Dr. Md. Mizanur Rahman Dr. Md. Sodrul Islam

## Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Autumn	PHP 613	Endocrine and Nutritional Pharmacology	MS	3.0	Dr. Md. Mizanur Rahman Dr. Md. Sodrul Islam



## Department of Surgery and Radiology

[www.bsmrau.edu.bd/sra/](http://www.bsmrau.edu.bd/sra/)

### Faculty Members

#### Associate Professor

Dr. Md. Aatur Rahman

#### Assistant Professor

DR. Sattiwikesh Paul (study leave)

DR. Md. Tuhinur Rahman

#### Lecturer

DR. Mousumi Saha

### Officers and Staff

Name	Designation
Mst. Masruha Atik	Lab Technician
Md. Abdulla Al Mamun	MLSS

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Aatur Rahman Rahman	Head, Dept. Surgery and Radiology	17.07.2020-till to date
DR. Md. Tuhinur Rahman	Specialist Doctor (Surgery and Radiology), VTH Assistant Provost (Ila Mitra Hall)	

### List of Publication by the Members of the Department

#### a) Journal

Rahman, M. A., Rahman, M. T., Saha, M., Sadi, R. S., Labib, M. T. R., Hasan, M. F., Haider, M. G., Rahman, M. M. & Alam, M.S. (2022). A Case Report on Euthanasia of a Rescued Horse Using Xylazine Hydrochloride and Thiopental Sodium. *Research in Agriculture Livestock and Fisheries*, 9(2), 213-219.


Yeasmin, T. N., Saha, M., Runa R. A., & Alam, M. R. (2022). Effects of Blood and Plasma Transfusion on Various Haematological and Biochemical Parameters in Anaemic Calves. *Research in Agriculture Livestock and Fisheries*, 9(2), 153-164.





### Courses Offered by the Department at Undergraduate Level

Term	Courses code	Title of the courses	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	SRA401	Anesthesiology	IV	3	Dr.Md.Ataur Rahman DR.Md.Tuhinur Rahman
	SRA402	Radiology and Imaging	IV	3	Dr.Md.Ataur Rahman DR.Md.Tuhinur Rahman
	SRA501	Surgery(Clinics)	V	2	Dr.Md.Ataur Rahman DR.Md.Tuhinur Rahman
Autumn	431	Farm Animal Surgery	IV	4	Dr.Md.Ataur Rahman DR.Md.Tuhinur Rahman
Winter	361	General Surgery	III	4	Dr.Md.Ataur Rahman DR.Md.Tuhinur Rahman
	461	Wildlife Zoo Aquatic and Companion Surgery	IV	3	Dr.Md.Ataur Rahman DR.Md.Tuhinur Rahman



## **Faculty of Agricultural Economics and Rural Development**

- Department of Agricultural Economics
- Department of Agricultural Finance and Cooperative
- Department of Agri-business
- Department of Rural Development
- Department of Statistics





# Faculty of Agricultural Economics and Rural Development

www.bsmrau.edu.bd/faerd

## Dean

Prof. Dr. Mohammad Nazmol Hasan

## Officers and Staff

Name	Designation
Md. Golam Mostafa	Assistant Registrar
Md. Naharul Islam	Assistant Registrar
Md. Ruhul Amin	UDA
Md. Hafizur Rahman	Class Room Attendant
Md. Zakir Hossen	MLSS

## Admission Statistics of BS (Ag/Fisheries/DVM/Ag. Econ) Students in 2022

Term	Summer Term	Summer	Remarks
No. of student admitted	100	---	---
No. of student admitted from merit list	---	---	---
No. of student admitted from Quota	05	---	---
No. of student admitted from Tribal Quota	02	---	---
No. of student admitted from waiting list	---	---	---
Minimum GPA of the admitted student	---	---	---
Maximum GPA of the admitted student	SSC+HSC= 10.00	---	---

## Year and term-wise student's enrollment, exams held, results published and student's passed in BS programs in 2022

### BS (1<sup>st</sup> year)

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer 2021	99+3=102	03-02-2022	12/05/2022	21/08/2022	68
Autumn 2021	85+10=95	05/06/2022	01/09/2022	28/12/2022	75
Winter 2021	77+2=79	10/10/22	27/12/2022	Results Yet not Published	-

### BS (2<sup>nd</sup> year)

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer 2021	84+6=90	03/02/2022	12/05/2022	21/08/2022	76
Autumn 2021	83+3=86	05/06/2022	01/09/2022	28/12/2022	85
Winter 2021	82	10/10/2022	27/12/2022	Results Yet not Published	-

**BS (3<sup>rd</sup> year)**

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer 2021	86	03-02-2022	12/05/2022	21/08/2022	86
Autumn 2021	86	05/06/2022	01/09/2022	06/12/2022	85
Winter 2021	86+1=87	10/10/22	27/12/2022	Results Yet not Published	-

**BS (4<sup>th</sup> year)**

Name of the term	No. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer 2021	86	03-02-2022	12/05/2022	21/08/2022	86
Autumn 2021	86	05/06/2022	01/09/2022	28/12/2022	85
Winter 2021	86	10/10/22	27/12/2022	17/01/2023	84

**Curricular Layout for BS (Ag/Fisheries/DVM/Ag. Econ Program)****1<sup>st</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
AEC 101 Introductory Economics	3+0	AEC 131 Introductory Microeconomics	3+0	AEC 161 Mathematical Economics	3+1.0
AFC 101 Agricultural Finance	2+0	AFC 131 Agricultural Cooperatives	3+0	AFC 161 Public Finance	3+0
CST 101 ICT in Agricultural Economics	3+1.0	AGR 131 Introductory Agronomy	3+1.0	GEN 161 Communicative English	2+0
AGB 101 Principles of Management	3+0	AGB 131 Principles of Marketing	3+0	RDV 161 Micro Finance	2+0
RDV 101 Principles of Rural Sociology	3+0	HRT 131 Introductory Horticulture	3+1.0	AGB 161 Introduction to Agribusiness	3+0
		GEU 131 History of the Rise of Bangladesh	2+0	STT 161 Basic Statistics	3+1.0

**2<sup>nd</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
AEC 203 Agricultural Production Economics	3+0	AEC 231 Analytical Microeconomics	3+0	AEC 262 Environmental Economics	2+0
AFC 201 Principles of Accounting	3+1.0	AEC 232 Natural Resource Economics	2+0	AEC-261 Introductory Macroeconomics	3+0
RDV 201 Gender Studies	2+0	RDV 231 Anthropology	2+0	RDV 261 Introductory Rural Development	3+0
AGB 203 Fundamentals of Price Analysis	3+1.0	FMG 237 Elements of Fisheries	2+1.0	AFC 261 Management Accounting	2+0
ASN 216 Introductory Animal Science	2+1.0	STT 232 Inferential Statistics	3+1.0	AGB 265 Agricultural Marketing	3+1.0
		AGE 241 Farm Mechanics	2+1.0	AEC 264 Economy of Bangladesh	3+1.5

**3<sup>rd</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
AEC 304 Agricultural Development Economics	3+0	AEC 333 Macroeconomics - II	3+0	CST 363 Agricultural Information System	3+1.5
STT 310 Regression Analysis	3+1.5	RDV 332 Rural Development - II	3+0	AEC 364 Economy of Bangladesh	3+0
AEC 306 International Economics	3+0	AEC 334 Farm Management	3+1.5	AGB 366 Supply Chain Management	3+1.5
AGB 306 Agricultural Marketing-II	3+1.5	AGB 333 Price Analysis - II	3+1.5	AGB 361 Rural Entrepreneurship	3+0
RDV 301 Government and Politics	3+0	AFC 332 Financial Management	3+1.5	AEC 365 Introductory Econometrics	3+1.5
AER 311 Introductory Agricultural Extension	3+1.5				

**4<sup>th</sup> Year**

Summer Term	Credit	Autumn Term	Credit	Winter Term	Credit
AEC 402 Research Methodology	3+1.5	CST 431 E-commerce and Management	3+1.5	Internship	0+15
AGB 404 Managerial Economics	3+0	AFC 435 Agricultural Credit and Money Market	3+0		
AEC 407 Agricultural Policy and Planning	3+0	AEC 432 Applied Econometrics	3+1.5		
STT 405 Quality Control	3+1.5	RDV 435 Poverty Studies	3+0		
AFC 404 Project Preparation and Management	3+1.5	AGB 434 Operations Research	3+1.5		



## Department of Agricultural Economics

[www.bsmrau.edu.bd/aec](http://www.bsmrau.edu.bd/aec)

### Faculty Members

#### Professor

Dr. M. Kamruzzaman (Vice-Chancellor, HSTU)

Dr. Kazi Tamim Rahman

#### Associate Professor

Dr. Asif Reza Anik

Jaba Rani Sarker (Study leave)

Md. Abdus Salam

#### Assistant Professor

Mashrat Jahan

Kaynath Akhi

Shamima Islam

Sajia Sharmin

### Officers and Staff

Name	Designation
Fazle Ruhan Moni	Lab. Assistant
Md. Lablu Miah	MLSS

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Bibi Panjatul Kubra (2015-05-3755)	Livelihood Diversification of Different Categories of Farmers in Bangladesh: Determinants, Constraints and Policy Development	Asif Reza Anik	Sum/22
Mahmuda Khatun (2015-05-3740)	Technical Efficiency of Brown Sugar Production in Fulbaria Upazila under Mymensingh district	Mashrat Jahan	Sum/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Md. Mizanur Rahman (SSC) Co-PI: Dr. Asif Reza Anik	South Asia Nitrogen Hub (SANH)	GCRF, UK BDT: 3.5 crore	2019



### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. Kazi Tamim Rahman Co-PI: Dr. Debasish Chandra Acharjee	Adoption and Economic Impact of Mechanized Harvesting of Boro Paddy in <i>Haor</i> Areas of Bangladesh during COVID-19 Pandemic	MoST, GoB BDT 200000.00	2022
PI: Dr. Md. Rafiqul Islam Co-PI: Dr. Md. Abiar Rahman Dr. Asif Reza Anik	Feasibility of expanding minor cereals cultivation in Bangladesh or Feasibility study of minor cereals for food and nutritional security in Bangladesh	KGF BDT 10.00 lac	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Asif Reza Anik	International DAAD seminar on: 'Climate Change Induced Water Disaster: case of 2021 Melamchi River flooding Sindhupalchok	01.11.2022 to 06.11.2022	Nepal	Participant
Asif Reza Anik	UKRI – GCRF South Asian Nitrogen Hub Annual Meeting	27.11.2022 to 01.12.2022	Maldives	Participant
Asif Reza Anik	SACEP/SANH meeting in Dhaka on 21 and 22 June 2022	20.06.2022 to 23.06.2022	Dhaka	Participant
Prof. Dr. Kazi Tamim Rahman	Macro-economic Impact Analysis of Global Commodity Price Inflation and Response to Crisis on 5F	02-04 Nov	BD	Participant
Mashrat Jahan	Workshop on Shudhdhchar	26.09.2022	Bangladesh	Participant
Mashrat Jahan	Application of Econometric Methods in Agricultural Research Using Stata” Arranged by the Department of Agribusiness, BSMRAU.	21.07.2022	Bangladesh	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Kazi Tamim Rahman	Head, AEC	01 Nov 2020 – 31 Oct 2022
Dr. Asif Reza Anik	Additional Director, IQAC	May 2021 to till date
Md. Abdus Salam	Head, AEC	01 Nov 2022 to till date
Md. Abdus Salam	Associate Director, International Affairs	01 July 2022 to till date

### List of Publication by the Members of the Department

#### a) Journal

Ahmed, A., Kamruzzaman, M., Jahan, M., & Akhi, K. (2022). Profitability assessment and efficiency analysis of tilapia farming in Bangladesh: An application on data envelopment analysis. *Int. J. Agril.*



- Res. Innov. Tech.*, 12(1), 120-128. <https://doi.org/10.3329/ijarit.v12i1.61041>
- Akhi, K., Islam, S., & Saha, S.M. (2022). Do farmers use waterlogged wastelands efficiently? An economic study on water chestnut farming in Bangladesh. *Environ Sci Pollut Res.*, <https://doi.org/10.1007/s11356-022-24447-x>
- Anik, A. R., Begho, T., Sharna, S., Eory, V., & Rahman, M. (2022). Toward improving nitrogen use efficiency in rice production: The socio-economic, climatic and technological determinants of briquette urea adoption. *Renewable Agriculture and Food Systems*, 1-12. doi:10.1017/S1742170522000060
- Begho, T. & Anik, A.R. (2022) Examining the effect of climate vulnerabilities on the discounting behaviour of farmers. *Climate Resilience and Sustainability (accepted)*, <https://doi.org/10.1002/cli2.46>
- Begho, T., Glenk, K., Anik, A. R., & Eory, V. (2022). A systematic review of factors that influence farmers' adoption of sustainable crop farming practices: Lessons for sustainable nitrogen management in South Asia. *Journal of Sustainable Agriculture and Environment*, 1(2), 149-160. doi: 10.1002/sae2.12016
- Das, S. & Jahan, M. (2022). Production and Profitability Intervention of Summer Hybrid Tomato: A Farm Level Review in Bangladesh. *American Journal of Economics and Business Administration*, 14(1), 21-30. <https://doi.org/10.3844/ajebasp.2022.21.30>
- Das, S., Jahan, M., Akhi, K., & Sharmin, S. (2022). Tea Garden Workers and their Food Security Assessment. *International Journal of Science and Research*, 11(2), 1231 – 1239. <https://doi.org/10.21275/SR22102090112>
- Das, S., Jahan, M., Akhi, K., & Sharmin, S. (2022). Tea Garden Workers and their Food Security Assessment. *International Journal of Science and Research (IJSR)*, 11(2):1231-1239.
- Hasan, M. R., & Jahan, M. (2022). Current economic performance and export potentialities of fisheries sector in Bangladesh. *Asian J. Soc. Sci. Leg. Stud*, 4(4), 122-137. <https://doi.org/10.34104/bjah.02201220137>
- Hossain, S., Jahan, M., & Khatun, F. (2022). Current status of dairy products in Bangladesh: A review on supply and utilization. *International Journal of Business, Management and Social Research*, 11(02), 609-618. <http://doi.org/10.18801/ijbmsr.110222.65>
- Jahan, M., & Kamruzzaman, M. (2022). Economic assessment of commercial Turkey and broiler farming in Bangladesh: an application of binary probit model. *Can. J. Bus. Inf. Stud.*, 4(4), 65-71. <https://doi.org/10.34104/cjbis.022.065071>
- Jahan, M., Sarker, J. R., Burman, P., & Barman, L. R. (2022). Groundnut production performance based on chemical fertilizer practices and its profitability conditions. *Int. J. Agril. Res. Innov. Tech.*, 12(2): 126-133. <https://doi.org/10.3329/ijarit.v12i2.64098>
- Khatun, F., Jahan, M., & Hossain, S. (2022). Evaluating the Production and Marketing Assessment of Selected Vegetables in Bangladesh. *American Journal of Agricultural and Biological Sciences*, 17(1), 23-33. <http://dx.doi.org/10.3844/ajabssp.2022.23.33>
- Khatun, M. F., Jahan, M., Das, K. R., Lee, K.Y., & Kil, E.-J. (2022). Population dynamics and biorational management of sucking insect vectors on chili (*Capsicum annum* L.) in Bangladesh. *Archives of Insect Biochemistry and Physiology*, e21980. <https://doi.org/10.1002/arch.21980>
- Rahman, S., Anik, A. R., & Sarker, J. R. (2022) Climate, Environment and Socio-Economic Drivers of Global Agricultural Productivity Growth. *Land*, 11(4):512. <https://doi.org/10.3390/land11040512>
- Salam, M. A.** (2022). Exploring the seasonal yield variability, production risk and efficiency: the case of rice farms in Bangladesh. *Heliyon*, 8(9), e10559. <https://doi.org/10.1016/j.heliyon.2022.e10559>
- Salam, M. A.** (2022). Regional technical efficiency and technology gap differences: The empirical evidence from rice farms in Bangladesh, *Economics Bulletin (Accepted)*
- Sarker, S. A., Wang, S., Adnan, K.M.M., Pooja, P., Akhi, K., & Akter, K. (2022). Renewable energy in





Bangladesh: economic growth and policy perspectives. *Journal of Science and Technology Policy Management*, <https://doi.org/10.1108/JSTPM-01-2019-0001>

Sharna, S. C., Anik, A. R., Rahman, S., & Salam, M. A. (2022). Impact of Social, Institutional and Environmental Factors on the Adoption of Sustainable Soil Management Practices: An Empirical Analysis from Bangladesh. *Land*, 11(12), 2206. <http://dx.doi.org/10.3390/land11122206>

Yang, A. L., Raghuram, N., Adhya, T. K., Porter, S. D., Panda, A. N., Kaushik, H., Jayaweera, A., Nissanka, S. P., Anik, A. R., Shifa, S., Sharna, S. C., Joshi, R., Watto, M. A., Pokharel, A., Shazly, A., Hassan, R., Bansal, S., Kanter, D., Das, S., & Jeffery, R. (2022). Policies to combat nitrogen pollution in South Asia: Gaps and opportunities. *Environmental Research Letters*, 17(2), 025007. <https://doi.org/10.1088/1748-9326/ac48b2>

### Postgraduate Student's Information

Program	Number
MS	26
PhD	-
Total =	26

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AEC 101	Introductory Economics	I	3.0	Md. Abdus Salam Sajia Sharmin
	AEC 201	Livestock Production Economics	II	3.0	Mashrat Jahan Sajia Sharmin
	AEC 202	Microeconomics II	II	3.0	Dr. Kazi Tamim Rahman Kaynath Akhi
	AEC 203	Agricultural Production Economics	II	3.0	Dr. Asif Reza Anik Shamima Islam
	AEC 304	Agricultural Development Economics	III	3.0	Dr. Kazi Tamim Rahman Mashrat Jahan
	AEC 306	International Economics	III	3.0	Kaynath Akhi Sajia Sharmin
	AEC 402	Research Methodology	IV	3.0	Dr. Kazi Tamim Rahman Kaynath Akhi
	AEC 407	Agricultural Policy and planning	IV	3.0	Md. Abdus Salam Mashrat Jahan



Autumn	AEC 131	Introductory Microeconomics	I	3.0	Dr. Kazi Tamim Rahman Dr. Asif Reza Anik
	AEC 231	Analytical Microeconomics	II	3.0	Dr. Kazi Tamim Rahman Kaynath Akhi
	AEC 232	Natural resource economics	II	2.0	Md. Abdus Salam Mashrat Jahan
	AEC 333	Macroeconomics II	III	3.0	Dr. Kazi Tamim Rahman Mashrat Jahan
	AEC 334	Farm Management	III	4.5	Dr. Kazi Tamim Rahman Sajia Sharmin
	AEC 432	Applied Econometrics	IV	4.5	Md. Abdus Salam Kaynath Akhi
	AEC 155	Agricultural Economics	I	3.00	Shamima Islam Sajia Sharmin
	AEC 231	Fisheries Economics	II	3.0	Mashrat Jahan Kaynath Akhi
Winter	AEC 161	Mathematical Economics	I	4.5	Kaynath Akhi Sajia Sharmin
	AEC 262	Environmental economics	II	2.0	Dr. Asif Reza Anik Mashrat Jahan
	AEC 263	Introductory Macroeconomics	II	3.0	Mashrat Jahan Sajia Sharmin
	AEC 264	Economy of Bangladesh	II	3.0	Mashrat Jahan Kaynath Akhi
	AEC 365	Introductory Econometrics	III	4.5	Dr. Kazi Tamim Rahman Dr. Asif Reza Anik
	AEC 365	Agricultural Marketing and Finance	III	3.0	Dr. Kazi Tamim Rahman Md. Abdus Salam
	AEC 461	Agricultural Marketing and Co-Operatives	IV	4.50	Md. Abdus Salam Sajia Sharmin

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AEC 540	Agriculture Development	MS	3.0	Mashrat Jahan Sajia Sharmin
	AEC 510	Agricultural Production Economics	MS	3.0	Dr. Asif Reza Anik Md. Abdus Salam
Autumn	AEC 503	Quantitative Methods in Economics	MS	3.0	Kazi Tamim Rahman Kaynath Akhi
Winter	AEC 501	Microeconomics I	MS	3.0	Dr. Kazi Tamim Rahman Shamima Islam
	AEC 531	Econometrics I	MS	3.0	Dr. Asif Reza Anik Md. Abdus Salam



# Department of Agricultural Finance and Cooperatives

www.bsmrau.edu.bd/afc

## Faculty Members

### Associate Professor

Most. Nilufa Khatun

### Assistant Professor

Md. Razib Hossain (Study Leave)

Ratna Begum

Sandip Mitra

## Officers and Staff

Name	Designation
Md. Abul Kalam Azad	MLSS
Tamanna	Lab. Attendant

## List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Sandip Mitra	Does credit constraint matter for technical efficiency and technological shifts of flower growers: An empirical study	RMW, BSMRAU BDT 100000.00	2022

## List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Most. Nilufa Khatun Co-PI: Sandip Mitra	Financial inclusion of farmers through mobile banking: Empirical evidence from Mymensingh and Narsingdi district of Bangladesh	RMW, BSMRAU BDT 300000.00	2022

## List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Most. Nilufa Khatun	Training on Teaching Load Calculation	13.11.2022	Bangladesh	Participant
Most. Nilufa Khatun Ratna Begum Sandip Mitra	Training on Suddhachar	29.09.2022	Bangladesh	Participant
Sandip Mitra	Scientific Writing Course	13.02.2022- 17.02.2022	Bangladesh	Participant
Sandip Mitra	Feed the Future Innovation Lab for Fish	25.07.2022	Bangladesh	Participant

**Administrative Duties by the Departmental Members (if any with tenure)**

Name	Position & Address	Duration
Most. Nilufa Khatun	Head, Department of Agricultural Finance and Cooperatives	From 01/ 03/2022

**List of Publication by the Members of the Department****a) Journal**

- Mitra, S., Dipto, M. R. A., Prodhan, M. M. H., Nahar, T., Khan, M. A. R., & Hajong, P. (2022). Does COVID-19 affect the flower growers' wellbeing, profitability, efficiency and technological shifts? An empirical study. *Journal of Agriculture and Food Research*, 9. <https://doi.org/10.1016/j.jafr.2022.100350>.
- Mitra, S., Khan, M. A., Nielsen, R., & Rahman, M.T. (2022). Improving aquaculture productivity, efficiency and profitability in Bangladesh: Does land ownership matter? *Aquaculture Economics and Management*, 26(2), 215-231. <https://doi.org/10.1080/13657305.2021.1983069>.
- Mitra, S., Khan, M.A., Rahman, M.T., & Nielsen, R. (2022). Effects of open water availability on productivity and efficiency of tilapia fish farming. *Aquaculture Economics and Management*, doi:10.1080/13657305.2022.2115578.
- Mitra, S., Prodhan, M. M. H., Khatun, M.N., Khan, M.A., & Acharjee, D. C. (2022). Impact of COVID-19 on fish consumer: Market price, expenditure and satisfaction perspective. *Journal of Agriculture and Food Research*, 10. <https://doi.org/10.1016/j.jafr.2022.100413>
- Sarker, M. N. I., Wu, M., Khatun, M. N., Alam, G. M. M., Shouse, R. C., & Amin, M. R (2022). Climate finance governance in hazard prone riverine islands in Bangladesh: pathway for promoting climate resilience. *Natural Hazards*, 110, 1115–1132. <https://doi.org/10.1007/s11069-021-04983-4>
- Yesmine, T., Hossain, M. E., Khan, M.A., Mitra, S., Saha, S.M., & Amin, M.R. (2022). Benchmarking the banking sector of Bangladesh: a comprehensive analysis of performance and efficiency. *Asian Journal of Economics and Banking*, <https://doi.org/10.1108/AJEB-08-2021-0094>

**Courses Offered by the Department at Undergraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AFC 101	Agricultural Finance	I	2	Most. Nilufa Khatun Sandip Mitra
	AFC 201	Principles of Accounting	II	3+1.5	Sandip Mitra Most. Nilufa Khatun
	AFC 202	Management Accounting	II	3	Sandip Mitra Md. Ruhul Amin
	AFC 210	Principles and Practices of Banking	II	3	Most. Nilufa Khatun Sandip Mitra
	AFC 404	Project preparation and management	IV	3+1.5	Most. Nilufa Khatun Sandip Mitra



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Autumn	AFC 131	Agricultural Cooperatives	I	2	Sandip Mitra Md. Ruhul Amin
	AFC 332	Financial Management	III	3+1.5	Most. Nilufa Khatun Sandip Mitra
	AFC 435	Agricultural Credit and Money Market	IV	3	Most. Nilufa Khatun Sandip Mitra
Winter	AFC 161	Public Finance	I	3	Most. Nilufa Khatun Sandip Mitra
	AFC 261	Management Accounting	II	2	Ratna Begum Sandip Mitra

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## Department of Agribusiness

www.bsmrau.edu.bd/agb

### Faculty Members

#### Professor

Dr. G. M. Monirul Alam

#### Associate Professor

Dr. Debasish Chandra Acharjee

Mst. Ashrafun Nahar

Farhana Arefeen Mila

#### Assistant Professor

Dr. Mst. Tania Parvin

#### Lecturer

Md. Ruhul Amin

### Officers and Staff

Name	Designation
Md. Mehedi Hasan	Lab Attendant
Md. Khorshed Alam	MLSS

### List of Research Project (ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Debasish Chandra Acharjee	Post-harvest fish losses and choice of market by the fish farmers in Hoar areas of Bangladesh	RMW BDT 900000.00	2020
PI: Dr. G M Monirul Alam	Modelling climate change impact on agriculture and developing mitigation and adaptation strategies for sustaining agricultural production in Bangladesh	KGF BDT 3700000.00	2020
PI: Md. Ruhul Amin	Assessing the marketing system of e-commerce integrated agribusiness of perishable commodities	RMW (Innovation Fund) BDT 100000.00	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. G M Monirul Alam	Production, Supply chain and consumer willingness-to-pay for organic vegetables in Bangladesh	MoST, GoB BDT 200000.00	2021-22
PI: Md. Ruhul Amin	Impact of Consumer Perception and Attitude on the Upliftment of Onion Market in Bangladesh	RMW (Innovation Fund) BDT 100000.00	2021-22



### List of Seminar/Workshop/Training attended (Local and Foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Md. Ruhul Amin	Application of Impact Assessment Methods in Agriculture, organized by BARC, Bangladesh	29 May-02 June, 2022	Bangladesh	Participant
Dr. Debasish Chandra Acharjee, Farhana Arefeen Mila, Dr. Mst. Tania Parvin and Md. Ruhul Amin,	International Participatory Research on the Hidden Dimensions of the Poverty	21 November 2022	Bangladesh	Participant
Farhana Arefeen Mila	Start Up Conference on “Climate Friendly and Climate Resilient Prawn Farming in Bangladesh”	26-29 November 2022	Khulna, Bangladesh	Participant
Dr. Mst. Tania Parvin	A Seminar on “Conceptualize Gendered Dimensions in Urban and Peri-urban Food Systems”	12 December 2022	Bangladesh	Participant
Dr. G. M. Monirul Alam, Dr. Debasish Chandra Acharjee, Farhana Arefeen Mila, Dr. Mst. Tania Parvin, Md. Ruhul Amin	17 <sup>th</sup> National Conference and Seminar on “Inclusive and Sustainable Agricultural Development in Bangladesh”	5-6 September 2022	BARC, Dhaka, Bangladesh	Participant

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Mst. Ashrafun Nahar	Head, Department of Agribusiness	Oct. 2022 to 22 Jan. 2023
Debasish Chandra Acharjee	Additional Director	Since 2022

### List of Publication by the Members of the Department

#### a) Journal

- Alam, G. M. M., Sarker, M. N. I., Gatto M., Bhandri, H., & Naziri, D. (2022). Impact of COVID-19 on fisheries and aquaculture sector in developing countries and way forward, *Sustainability*, 14, 1071 (IF: 3.89).
- Dikitanan, R. C., Pede, V. O., Rejesus, R. M., Bhandari, H, Alam, G. M. M., & Andrade, R. S. (2022). Assessing the returns to research investments in rice varietal development: Evidence from the Philippines and Bangladesh, *Global Food Security*, <https://doi.org/10.1016/j.gfs.2022.100646> (Impact Factor: 9.02).
- Filho, W. L., Alam, G. M. M., Nagy, G. J., Rahman, M. M., Roy, S., Wolf, S., Saroar, S., & Li, C. (2022). Climate change adaptation responses among riparian settlements: a case study from Bangladesh, *PLOS ONE* (IF: 3.75).
- Filho, W. L., Wolf, F., Abubakar, S. R., El-Amin, A. Q., Roy, S., Malakar, K., Alam, G. M. M., & Sarker, M. N. I. (2022). Understanding the Socio-Economic Impacts of Climate Change on Riparian Communities. *River Research and Applications*, (Impact Factor: 2.78).



- Gosh, K., Chowdhury, S., Acharjee, D. C., Mamun, A. A., & Ghosh, R. (2022). Assessing the Economic Impacts of COVID-19 on the Aquaculture and Fisheries Sectors in Relation to Food Security: A Critical Review. *Sustainability*, 14(14), 8766. <https://doi.org/10.3390/su14148766> (registering DOI).
- Hossain, M. E., Islam, M. S., Rana, M. J., Amin, M. R., Rokonzaman, M., Chakroborty, S., & Saha, S. M. (2022). Scaling the changes in lifestyle, attitude, and behavioral patterns among COVID-19 vaccinated people: Insights from Bangladesh. *Human Vaccines & Immunotherapeutics*, 18(1), 2022920. <https://doi.org/10.1080/21645515.2021.2022920>
- Hossain, M. S., Alam, G. M. M., Fahad, S., Sarker, T., Moniruzzaman, M., & Rabbany, M. G. (2022). Smallholder farmers' willingness to pay for flood insurance as climate change adaptation strategy in northern Bangladesh, *Journal of Cleaner Production*, 338, 30584. (Impact Factor: 11.07).
- Islam, A., Haque, S., Parvin, M. T., Zaman, N., Nazu, S. B., Salman, M., & Hossain, M. E. (2022). Insights of Handloom Producers of Sirajganj District in Bangladesh. *Journal of Bangladesh Agricultural University*, 20(4), 433-440. <https://doi.org/10.5455/JBAU.129305>
- Islam, F., Alam, G. M. M., Begum, R., Sarker, M. N. I., & Bhandari, H. (2022). Farm level adaptation to climate change: insight from rice farmers in the coastal region of Bangladesh, *Local Environment*, 27(6), 671-681 (Impact Factor: 3.59).
- Islam, M. H. T., Islam, A. R. M. T., Shahid, S., Alam, G. M. M., Biswas, J. C., Rahman, M. M., Roy, D. K., & Kamruzzaman, M. (2022). Future precipitation projection in Bangladesh using SimCLIM climate model: A multi-model ensemble approach. *International Journal of Climatology*, (Impact Factor: 4.069).
- Mallick, J., Salam, R., Amin, R., Islam, A. R. M. T., Islam A., Siddik, M. N. A., & Alam, G. M. M. (2022). Assessing factors affecting drought, earthquake, and food risk perception: empirical evidence from Bangladesh. *Natural Hazards*, (IF: 3.15).
- Mamun, A. A., Islam, A. R. M. T., Alam, E., Pal, S. C., & Alam, G. M. M. (2022). Assessing riverbank erosion and livelihood resilience using traditional approaches in northern Bangladesh, *Sustainability*, 14, 2348 (IF: 3.89).
- Mamun, A. A., Islam, A. R. M. T., Alam, G. M. M., Sarker, M. N. I., Erdiaw-Kwasie, M. O., Bhandari, H., & Mallick, J. (2022). Livelihood Vulnerability of Char Land Communities to Climate Change and Natural Hazards in Bangladesh: An Application of Livelihood Vulnerability Index, *Natural Hazards*, (IF: 3.15).
- Mila, F. A., Nahar, A., Amin, M. R., Ahmed, A., & Culas, R. J. (2022). Empirical Assessment of Onion Supply Chain Constraints in Bangladesh: A Pre-Covid to Covid situation. *Journal of Agriculture and Food Research*, *Journal of Agriculture and Food Research*, 10 (2022), 100418. doi: <https://doi.org/10.1016/j.jafr.2022.100418>.
- Mila, F. A., Noorunnahar, M., Nahar, A., Acharjee, D. C., Parvin, M. T., & Culas, R. J. (2022). Modeling and Forecasting of Tea Production, Consumption and Export in Bangladesh. *Current Applied Science and Technology*, 22(2), 1-20. doi: 10.55003/cast.2022.02.22.009.
- Mitra, S., Prodhan, M. M. H., Khatun, M. N., Khan, M. A., & Acharjee, D. C. (2022). Impact of COVID-19 on fish consumers: Market price, expenditure, and satisfaction perspective. *Journal of Agriculture and Food Research*,
- Nahar, A., Mila, F. A., Culas, R. J., & Amin, M. R. (2022). Assessing the Factors and Constraints for Value Chain Development of Dairy Food Products in Bangladesh. *Heliyon*, 8 (10), e10787. doi: <https://doi.org/10.1016/j.heliyon.2022.e10787>.
- Rahman, M., Sujun, M., Acharjee, D. C., Rasha, R., & Rahman, M. (2022). Intensity of adoption and welfare impacts of drought-tolerant rice varieties cultivation in Bangladesh. *Heliyon*, 8(5), e09490. doi: 10.1016/j.heliyon.2022.e09490





- Sarker, M. N. I., Alam, G. M. M., Firdaus, R. B. R., Biswas, J. C., Islam, A. R. M. T., Raihan M. L., Alam, K., Joshi, N. P., & Shaw, R. (2022). Assessment of flood vulnerability of riverine island community using a composite flood vulnerability index, *International Journal of Disaster Risk Reduction*, 82, 103306 (Impact Factor: 4.48).
- Tasnuva, A., Bari Q. H., Islam, A. R. M. T., & Alam, G. M. M. (2022). Livelihood and Climate Vulnerability of Coastal Communities to Natural Disaster in South-Western Bangladesh, *International Journal of Sustainable Development & World Ecology*, <https://doi.org/10.1080/13504509.2022.2142691> (IF: 3.87).
- Yesmine, T., Hossain, M. E., Khan, M. A., Mitra, S., Saha, S. M., & Amin, M. R. (2022). Benchmarking the banking sector of Bangladesh: A comprehensive analysis of performance and efficiency. *Asian Journal of Economics and Banking*, <https://doi.org/10.1108/AJEB-08-2021-0094>

#### b) Book/Book Chapter

- Al Mamun, M. A., Rahman, A. T. M. S., Shabee, M. S. S. A., Das, J., Alam, G. M. M., & Kamruzzaman, M. (2022). Effects of Climatic Hazards on Agriculture in the Teesta Basin of Bangladesh, In: Das, J., Bhattacharya, S.K. (eds) *Monitoring and Managing Multi-hazards. GIScience and Geo-environmental Modelling*. Springer, Cham. [https://doi.org/10.1007/978-3-031-15377-8\\_5](https://doi.org/10.1007/978-3-031-15377-8_5)
- Al Mamun, M. A., Rahman, A. T. M. S., Shabee, M. S. S. A., Das, J., Islam, M. D., Alam, G. M. M., & Kamruzzaman, M. (2022). Adaptation to Climate Change in Agriculture at Teesta Basin in Bangladesh, In: Das, J., Bhattacharya, S.K. (eds) *Monitoring and Managing Multi-hazards. GIScience and Geo-environmental Modelling*. Springer, Cham. [https://doi.org/10.1007/978-3-031-15377-8\\_19](https://doi.org/10.1007/978-3-031-15377-8_19)
- Sarker, M. N. I., Raihan, M. L., Parvin, G. A., Alam, G. M. M., & Chumky, T. (2022). Urban vulnerability and resilience in the face of natural hazards: a critical conceptual review, In Shaw et al (eds) *Handbook on Climate Change and Disasters*, Springer. <https://doi.org/10.4337/9781800371613.00029>

#### Postgraduate Student's Information

Program	Number
MS	11
PhD	-
Total =	11

#### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AGB 101	Principles of Management	I	3.0	Dr. G.M. Monirul Alam Md. Ruhul Amin
	AGB 203	Fundamentals of Price Analysis	II	4.0	Dr. Debasish Chandra Acharjee Md. Ruhul Amin
	AGB 404	Managerial Economics	IV	3.0	Dr. G. M. Monirul Alam Farhana Arefeen Mila
	AGB 501	Livestock and Poultry Marketing & Agribusiness	V (FVMAS)	3.0	Dr. G. M. Monirul Alam Dr. Debasish Chandra Acharjee



Autumn	AGB 131	Principles of Marketing	I	3.0	Dr. Debasish Chandra Acharjee Farhana Arefeen Mila
	AGB 333	Agricultural Price Analysis	III	4.0	Dr. Debasish Chandra Acharjee Md. Ruhul Amin
	AGB 434	Operations Research	IV	4.5	Dr. G.M. Monirul Alam Md. Ruhul Amin
Winter	AGB 161	Introduction to Agribusiness	I	3.0	Dr. G.M. Monirul Alam Mst. Ashrafun Nahar
	AGB 265	Agricultural Marketing	II	4.0	Dr. Debasish Chandra Acharjee Md. Ruhul Amin
	AGB 361	Entrepreneurship Development	III	3	Dr. G.M. Monirul Alam Md. Ruhul Amin
	AGB 366	Supply Chain Management	III	4.5	Dr. Debasish Chandra Acharjee Dr. Mst. Tania Parvin

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AGB 501	Agribusiness Management	MS	3.0	Farhana Arefeen Mila Most. Ashrafun Nahar
	AGB 515	Small and Medium Enterprises Development	MS	3.0	Dr. G M Monirul Alam Dr. Debasish Chandra Acharjee
Autumn	AGB 505	Agricultural Prices and Policy Analysis	MS	3.0	Farhana Arefeen Mila Dr. Debasish Chandra Acharjee
	AGB 511	Value Chain and Inclusive Market Development	MS	3.0	Dr. Debasish Chandra Acharjee Dr. G M Monirul Alam
Winter	AGB 531	Business Economics	MS	3.0	Dr. Mst. Tania Parvin
	AGB 557	E-commerce in Agribusiness	MS	3.0	Dr. Debasish Chandra Acharjee Dr. G M Monirul Alam

### Other's Information:

#### Journal Editorial Team Member (Dr G M Monirul Alam):

- **Editorial Board Member:** 'World Review of Science, Technology and Sustainable Development', Inderscience Publishers.
- 'Asian Development Policy Review', Asian Economic and Social Society.
- BMC Research Notes.
- **Guest Editor:** International Journal of Climate Change Strategies and Management (Emerald); Sustainability (MDPI)
- Chief Editor, of a book on Vulnerability and resilience in the global south: Human adaptations for sustainable futures, Springer.



## Department of Rural Development

www.bsmrau.edu.bd/rdv

### Faculty Members

#### Professor

Dr. Md. Monjurul Islam

#### Assistant Professor

Monira Parvin Moon (Study Leave)

#### Lecturer

Atia Sharmin Ame

### Officers and Staff

Name	Designation
Md. Shahin Alam	Office Assistant cum Computer Operator
Md. Al-Mamun	MLSS

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Md. Monjurul Islam	Perception and Awareness of Rice Farmers about Crop Insurance in the Northern Part of Bangladesh.	MoST, GoB BDT 250000.00	2022
Dr. Md. Monjurul Islam	Exploring and Designing a Business Model for Rice Production under Circular Economy in Bangladesh.	RMC, BSMRAU BDT 800000.00	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Atia Sharmin Ame	Impact of Covid-19 on livelihood and food insecurity among lower income people in Gazipur District: An investigation of coping strategy	MoST, GoB BDT 80000.00	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Monjurul Islam	Training for Trainers (ToT) for Climate Change Project Proposal Development for Accessing International Funds Organized by Economic Relations Division, Ministry of Finance, GoB and The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Bangladesh Conducted by Eco. Ltd. UK and Centre for Climate Change and Environmental Research (C3ER), BRAC University	27 May 2022 to 01 June 2022	BRAC CDM Rajendapur Gazipur Bangladesh	Participant



Dr. Md. Monjurul Islam	Workshop on Green Climate Fund (GCF) Organized by ERD, Ministry of Planning, GoB	28 July 2022	Dhaka, Bangladesh	Participant
Dr. Md. Monjurul Islam	“Assessing Transboundary Movement of Single-use Plastic Waste Through River Channels in Bangladesh” Organized by Environment and Social Development Organization (ESDO)	20 November 2022	Dhaka, Bangladesh	Participant
Dr. Md. Monjurul Islam	“Prioritization of Research Areas in Fisheries Sub-sector of Bangladesh”	18 December 2022	BARC, Dhaka, Bangladesh	Socioeconomic Expert

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Monjurul Islam	Head, Department of Rural Development	01-11-2018 to till date
Dr. Md. Monjurul Islam	Associate Director, Outreach Program, BSMRAU	01-08-2019 to 31-07-2021

### List of Publication by the Members of the Department

#### a) Journal

- Akter, K., Sabur, S. A., Ame, A. S., & Islam, M. M. (2022). Postharvest Losses along the Supply Chain of Potato in Bangladesh: A Micro-Level Study. *European Journal of Agriculture and Food Sciences*, 4(2), 67-72.
- Ame, A. S., Mozumdar, L., Islam M. A., & Saha S. (2022). Social networks and reproductive healthcare-seeking behaviour of Garo and Mandai women in Bangladesh. *South Asian Survey*, 29(2), 181–195.
- Kundu, N. D., Uddin, M. S., Islam, M. M., Khatun, M., Khandoker, S., & Hoq, M. S. (2022). Determinants, Challenges and Opportunities of Pulses Crop in Southern Char land Areas of Bangladesh. *Farm Economy, The Journal of the Bangladesh Agricultural Economists Association*, 17, 91-102.
- Tahera, K., Sabur, S. A., Ame, A. S., Moniruzzaman, M., & Islam, M. M. (2022). Profitability and value chain analysis of cut flower in Bangladesh: Exploring value addition among different actors. *Bangladesh Rural Development Studies (BRDS)*, 25(1), (49-58).

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	RDV 101	Principles of Rural Sociology	I	3.0	Dr. Md. Monjurul Islam Atia Sharmin Ame
	RDV 201	Gender Studies	II	2.0	Dr. Md. Monjurul Islam Atia Sharmin Ame
	RDV 301	Government and Politics	III	3.0	Dr. Md. Monjurul Islam Atia Sharmin Ame



Autumn	RDV 231	Anthropology	II	3.0	Dr. Md. Monjurul Islam Atia Sharmin Ame
	RDV 332	Rural Development	III	3.0	Dr. Md. Monjurul Islam Atia Sharmin Ame
	RDV 435	Poverty Studies	IV	3.0	Dr. Md. Monjurul Islam Atia Sharmin Ame
Winter	RDV 161	Micro Finance	I	2.0	Dr. Md. Monjurul Islam Atia Sharmin Ame
	RDV 261	Introductory Rural Development	II	3.0	Dr. Md. Monjurul Islam Atia Sharmin Ame

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Winter	RDV 531	Gender Studies	MS	3.0	Dr. Md. Monjurul Islam Atia Sharmin Ame



## Department of Statistics

[www.bsmrau.edu.bd/stt](http://www.bsmrau.edu.bd/stt)

### Faculty Members

#### Professor

Dr. Mohammad Nazmol Hasan

#### Associate Professor

Keya Rani Das

Nasrin Sultana (on study leave)

#### Assistant Professor

Mst. Noorunnahar

### Officers and Staff

Name	Designation
Mst. Sufiya Khatun	Lab Assistant
Md. Abdul Malek	Senior MLSS

### List of Research Project (Ongoing): Internal/External

Name the PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Mohammad Nazmol Hasan Co-PI: Keya Rani Das	Identification of toxicogenomic biomarkers and their functional analysis using machine learning and integrated bioinformatics analysis	MoST, GoB BDT 250000.00	2022
PI: Dr. Mohammad Nazmol Hasan	Genome-wide identification and characterization of <i>MATE</i> gene families and their associated regulatory elements in common bean and papaya using integrated bioinformatics approaches	RMW, BSMRAU BDT 680000.00	2022
PI: Mst. Noorunnahar	Impact of Climate Change on Infectious Diseases among Farmers of Bangladesh	BSMRAU Innovation Fund BDT 100000.00	2022
Co-PI: Mst. Noorunnahar	Perception and Awareness of Rice Farmers about Crop Insurance in the Northern Part of Bangladesh	MoST, GoB BDT 250000.00	2022

### List of Seminar/Workshop/Training attended (Local and Foreign)

Name of the Teacher	Program attended	Date	Country	Role / contribution in the program
Dr. Mohammad Nazmol Hasan	Training on Introduction to Statistics and design of experiments (Recap session)	27-28 November, 2022	Bangladesh	Resource Person
Dr. Mohammad Nazmol Hasan	Basics of multivariate data analysis and its application in agricultural sciences	27-28 November, 2022	Bangladesh	Resource Person



Keya Rani Das	Basic concept of descriptive statistics and its application in agricultural (agriculture, fisheries, animal sciences and agricultural economics) sciences	27-28 November, 2022	Bangladesh	Resource Person
Keya Rani Das	Correlation and regression analysis and their scope in agricultural data analysis	27-28 November, 2022	Bangladesh	Resource Person

### Administrative Duties by the Departmental Members

Name	Position & Address	Duration
Dr. Mohammad Nazmol Hasan	Dean, Faculty of AERD	2022
Keya Rani Das	Head, Dept. of Statistics	2022

### List of Publications by the Members of the Department

#### a) Journal

- Das, K. R., Sultana, N., Karmokar, P. K., & Hasan, M. N. A. (2022). Comparison of Trend Models for Predicting Tea Production in Bangladesh. *Nepalese Journal of Statistics*, 6, 51-62. doi: 10.3126/njs.v6i01.50804
- Jannat, B., Kanon, K. F., Sultana, N., Alam, M. S., & Alam, M. S. (2022). Morphological variations between native and Vietnam-originated striped snakeheads (*Channa striata*) in Bangladesh. *Bangladesh Journal of Fisheries*, 34(1), 41-52. doi: <https://doi.org/10.52168/bjf.2022.34.5>.
- Khatun, M. F., Jahan, M., Das, K. R., Lee, K. Y., & Kil, E. J. (2022). Population dynamics and biorational management of sucking insect vectors on chili (*Capsicum annum* L.) in Bangladesh. *Archives of Insect Biochemistry and Physiology*, e21980, 1-16. <https://doi.org/10.1002/arch.21980>
- Mila, F. A., Noorunnahar, M., Nahar, A., Acharjee, D. C., Parvin, M. T., & Culas, R. J. (2022). Modelling and Forecasting of Tea Production, Consumption and Export in Bangladesh. *Current Applied Science and Technology*, 22(2), 1-20. doi: 10.55003/cast.2022.02.22.009

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	STT 201	Basic Statistics	II	4.5	Dr. Mohammad Nazmol Hasan Mst. Noorunnahar
	STT 310	Regression Analysis	III	4.5	Dr. Mohammad Nazmol Hasan Nasrin Sultana
	STT 405	Quality Control	IV	4.5	Keya Rani Das Mst. Noorunnahar
Autumn	STT 232	Inferential Statistics	II	4.5	Dr. Mohammad Nazmol Hasan Keya Rani Das
	STT 331	Biostatistics	III	4.5	Dr. Mohammad Nazmol Hasan Mst. Noorunnahar



Winter	STT 161	Basic Statistics	I	4.5	Dr. Mohammad Nazmol Hasan Mst. Noorunnahar
	STT 270	Basic Statistics	II	4.5	Dr. Mohammad Nazmol Hasan Keya Rani Das

**Courses Offered by the Department at Postgraduate Level**

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	STT 510	Design of Experiments	MS/ PhD	3.0	Dr. Mohammad Nazmol Hasan Mst. Noorunnahar
	STT 505	Regression Analysis	MS/ PhD	3.0	Keya Rani Das Mst. Noorunnahar
Autumn	STT 501	Methods of Statistics	MS/ PhD	3.0	Mst. Noorunnahar Keya Rani Das
	STT 520	Sampling and Surveys	MS/ PhD	3.0	Dr. Md. Ismail Hossain (Adjunct Faculty)
Winter	STT 510	Design of Experiments	MS/ PhD	3.0	Dr. Mohammad Nazmol Hasan Mst. Noorunnahar







## Faculty of Forestry and Environment



### Faculty of Forestry and Environment

- Department of Forest Ecology
- Department of Silviculture
- Department of Wood Science and Technology
- Department of Forest Protection
- Department of Forest Policy and Management
- Department of Agroforestry and Environment
- Department of Natural Resource and Conservation
- Department of Remote Sensing and GIS
- Department of Environmental Hazard and Disaster Management





## Faculty of Forestry and Environment

[www.bsmrau.edu.bd/forestry](http://www.bsmrau.edu.bd/forestry)

### Dean

Prof. Dr. Md. Main Uddin Miah

### Officers and Staff

Name	Designation
Mohammad Abbas Uddin	Assistant Registrar

### Admission Statistics of BS (Ag) Student for 2022

Term	Summer Term	Summer	Remarks
No. of student admitted	30		
No. of student admitted from merit list	28		
No. of student admitted from FF Quota	01		
No. of student admitted from Tribal Quota	01		
No. of student admitted from waiting list	-		
Minimum GPA of the admitted student	5.00		
Maximum GPA of the admitted student	5.00		

### Year and term-wise students enrollment, exams held, results published and students passed in BS Programs in 2022

#### BS (1<sup>st</sup> Year)

Name of the term	Not. of students enrolled	Starting date	Exam held on	Results published on	No. of students passed
Summer	30	29 January, 2023		-	-
Autumn				-	-
Winter				-	-



## Department of Agroforestry and Environment

[www.bsmrau.edu.bd/afe/](http://www.bsmrau.edu.bd/afe/)

### Faculty Members

#### Professor

Dr. Md. Giashuddin Miah  
Dr. Md. Main Uddin Miah  
Mr. Tofayel Ahamed  
Dr. Md. Abiar Rahman  
Dr. Satya Ranjan Saha  
Dr. Noor Shaila Sarmin

#### Associate Professor

Dr. Shohana Parvin  
Dr. Hasan Muhammad Abdullah  
Dr. Minhaz Ahmed

#### Assistant Professor

Dr. Satyen Mondal

### Officers and Staff

Name	Designation
Md. Abdul Hannan	Technical Officer
Mohammad Arif Uzzaman	Asst. Technical Officer
Saiful Islam	Office Assistant Cum Computer Operator
Arafat Hossain	MLSS
Moshiur Rahman	Lab. Attendant

### MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Md. Rassel Mia (2015-05-3506)	Productivity, Profitability and Land Use of Guava-Vegetables –Species Agroforestry System	Dr. Md. Abiar Rahman	Sum/22
Laboni Shifat Pingki (2016-05-3843)	Performance of Three Winter Vegetables in Aonla Based Agroforestry System	Prof. Tofayel Ahamed	Sum/22
Maruf Hossain (2016-05-3858)	Quantifying Canopy Health and Nutrient of Wetland Aman Rice Utilizing Multi-Temporal Unmanned Arial System	Dr. Hasan Muhammad Abdullah	Aut/22
Shima Khatun (2019-11-5347)	Performance of Sunflower at Different Pruning Regime of Albida	Dr. Noor Shaila Sarmin	Aut/22



### PhD Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Md. Iqbal Hossain (2006-11-1836)	Agar-Based Agroforestry Model in Maximizing the Productivity and Profitability at Farm Level	Dr. Md. Abiar Rahman	Sum/22
Tahmina Afroz (2007-05-1896)	Greenhouse Gas Inventory for Agriculture, Forestry and other Land Uses in Three District Location of Bangladesh	Dr. Md. Giashuddin Miah	Aut/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
PI: Dr. Md. Main Uddin Miah Co-PI: Prof. Tofayel Ahamed	Development of Aonla-Carrambola-Lemon-Dragon fruit vegetable based Multistoried Agroforestry Model	RMW, BSMRAU BDT 1100000/-	
PI: Dr. Md. Abiar Rahamn Co PI: Dr. Satya Ranjan Saha	Exploring The Effectiveness Of BSMRAU Developed Vegetables for Fruit Tree Based Agroforestry Systems Under On-Farm Condition	RMW, BSMRAU BDT 960000/-	2020
PI: Dr. Md. Abiar Rahman	Developing Urban-Rural Partnerships Framework to Mitigate Climate-induced Water Availability Impacts on Food, Energy and Water (FEW) Security at Regional Level	APN (Japan) BDT 950000/-	2021
PI: Dr. Md. Abiar Rahman	Effect of Different Levels of Fertilizers and Types of Mulching Materials on the Growth and Yield of Sweet Potato	UGC BDT 300000/-	2022
PI: Dr. Md. Abiar Rahman	Guava-Vegetables-Species Agroforestry System: A Sustainable Crop Production System for Food, Nutrition and Income Security	MoST BDT 300000/-	2022
PI: Dr. Shohana Parvin Co-PI: Dr. Satya Ranjan Saha	Alleviation of Salinity and Heavy Metal Mediated Oxidative Stress in Mint ( <i>Mentha</i> sp.) Through Improved Exogenous Application of Spermidine	RMW, BSMRAU BDT 1100000/-	2021
PI: Satya Ranjan Saha Co-PI: Prof. Dr. Md. Abiar Rahamn	Improvement and Development of Agar Based Multistoried Agroforestry System for Higher Production, Profitability and Land Use Under the Old Brahmaputra Flood Plain Areas of Bangladesh	BANBEIS BDT 1835000/-	
PI: Dr. Noor Shaila Sarmin Co-PI: Dr. Shaikh Shamim Hasan	Dynamics of Land Use Land Cover (LULC) Change and its Effect on Agriculture Water Quality at Upazila Level in Gazipur, Bangladesh	RMW, BSMRAU 800000/-	2020



PI: Dr. Satyen Mondal CoPI: Dr. Noor Shaila Sarmin	Crop Suitability Mapping and Exploring Improved Cropping Patterns for Coastal Saline Ecosystem of Bangladesh	RMW, BSMRAU BDT 900000/-	2022
PI: Dr. Hasan Muhammad Abdullah	Monitoring Fodder Quality Using UAV-Based Multispectral Imaging and Field Sampling	RMW, BSMRAU BDT 660000/-	2022

### List of Research Project (Completed): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
PI: Dr. Md. Abiar Rahman	Insights into Socio-Economic Features to Reveal the Controversy on Eucalyptus Based Agroforestry System in Northern Region of Bangladesh	MoEdu BDT 1200000/-	2022
PI: Dr. Md. Abiar Rahman	The Study of Influences of the Large Influx of Refugees on Local Societies and Forest Resources in Developing Countries	JSPS/Kyushu University	2022

### List of Seminar/Workshop/Training Attended (Local and foreign)

Name	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Giashuddin Miah	UGC-SAP International Seminar on “Development Cooperation between India & Neighboring Countries: Possibilities & Challenges”	22-24 February 2022	India	Resource person
Dr. Md. Abiar Rahman	Need, Scope, Process and Importance of Germplasm Exchange	05-06 January 2022	Bangladesh	Trainer
Dr. Md. Abiar Rahman	Laboratory Management of BSMARU	27 February 2022	IQAC, BAMRAU	Trainer
Dr. Md. Abiar Rahman	UGC, APA Inspection & Knowledge Sharing	11 June 2022	IQAC, BAMRAU	Trainer
Dr. Md. Abiar Rahman	Regional Workshop on Developing Urban-Rural Partnership Framework to Migrate Climate- Induced Water Availability Impacts on Food, Energy and Water (FEW) Security at Regional Level.	23-25 July 2022	India	Speaker
Dr. Md. Abiar Rahman	Regional Workshop on Developing Urban-Rural Partnership Framework to Migrate Climate- Induced Water Availability Impacts on Food, Energy and Water (FEW) Security at Regional Level.	12-14 September 2022	Bangladesh	Speaker



Dr. Md. Abiar Rahman	বশেমুরক্বি সেবা প্রদান প্রতিশ্রুতি বিষয়ের আওতাধীন দপ্তরসমূহের ১ম ত্রৈমাসিক সমন্বয় সভা	27 Sep. 2022	IQAC, BAMRAU	Trainer
Dr. Md. Abiar Rahman	সেবা প্রদান প্রতিশ্রুতি বাস্তবায়ন কর্মপরিকল্পনা	29 Sep. 2022	IQAC, BAMRAU	Trainer
Dr. Md. Abiar Rahman	অভিযোগ প্রতিকার ব্যবস্থা এবং জিআরএস সফটওয়্যার	27 Oct. 2022	IQAC, BAMRAU	Trainer
Dr. Noor Shaila Sarmin	7th International Conference for Women in Science Without Borders	12-14 September 2022	Malaysia (Virtual)	Presenter
Dr. Shohana Parvin	Training on Atomic Absorption Spectrophotometer	6-11 December 2022	India	Trainee
Dr. Minhaz Ahmed	Training on Atomic Absorption Spectrophotometer	6-11 December 2022	India	Trainee
Dr. Satyen Mondal	Training on Atomic Absorption Spectrophotometer	6-11 December 2022	India	Trainee

### Administrative Duties by the Departmental Members (if any with tenure)

Name	Position & Address	Duration
Dr. Md. Giashuddin Miah	Vice Chancellor BSMRAU	Since 10 June 2017
Prof. Tofayel Ahamed	Treasurer BSMRAU	Since 23 October 2017
Dr. Md. Main Uddin Miah	Director, Central Laboratory Dean, Faculty of Forestry and Environment	Since 09 September 2020 Since 11 November 2022
Dr. Md. Abiar Rahman	Director, IQAC Country Liaison Scientist, World Agroforestry (ICRAF), Bangladesh Program Chief Innovation Officer, BSMRAU Convener, BSMRAU Promotional Team	Since 01 February 2019 Since April 2019 Since April 2021 Since November 2022
Dr. Satya Ranjan Saha	Provost, Temporary Ladies Hall	Since 26 September 2021
Dr. Noor Shaila Sarmin	Provost, Ila Mitra Hall	Since 17 November 2021
Dr. Shohana Parvin	Head	Since 17 June 2021
Dr. Minhaz Ahmed	Assistant Provost, STA Hall	Since 2019
Dr. Hasan Muhammad Abdullah	Associate Director, Outreach	Since September 2021
Dr. Satyen Mondal	Assistant Provost, SAM Hall	Since 13 October 2022

### List of Publication by the Members of the Department

#### a) Journal

Afroza, S., Debsharma, S. K., Mondal, S., Maniruzzaman, S., Islam, M. M. A. F., Rahim, M. A., &



- Haque, M. A. (2022). Effect of Planting Time on Growth and Yield of Garlic (*Allium Sativum* L.) Genotypes. *Asian Journal of Research in Crop Science*, 7(2), 1-12. <https://doi.org/10.9734/ajrcs/2022/v7i230133>
- Ahmed, M., Rahman M. A., Hoque, M. Z., Hossain, M. S., & Matsumoto, M. (2022). Assessment of Ecological Risk through Toxic Heavy Metal Contamination in Konabari Terrace Industrial Area of Gazipur, Bangladesh. *Journal of the Faculty of Agriculture, Kyushu University*, 67 (1), 33–38.
- Barua, H., Saha, S. R., Ivy, N. A., Rasul, M.G., & Islam, A. K. M. A. (2022). Genetic Divergence of Guava (*Psidium guajava* L.) Genotypes in Bangladesh. *SAARC J. Agric.*, 20(1), 15-28. doi: <https://doi.org/10.3329/sja.v20i1.60618>
- Bhuiyan, M. A. B., Islam, S. M. N., Bukhari, M. A. I., Kader, M. A., Chowdhury, M. Z. H., Alam, M. Z., ... & Jenny, F. (2022). First report of Pestalotiopsis microspora causing leaf blight of banana in Bangladesh. *Plant disease*, 106(5), 1518.
- Biswas, A., Akter, S., Mondal, S., Barman, H. N., Pervin, S., Ahmed, M. M. E., Rahman, M. S. & Yasmeen, R. (2022). Phenotyping Rice Germplasm Associated with Salinity Tolerance Under Hydroponics System. *Bangladesh Agron. J.*, 25(1): 39-47.
- Das, A. K., Rahman, M. A., Mitra, P., Sukhwani, V., Shaw, R., Mitra, B. K., Sharma, D., Deshkar, S., & Morey, B. (2022). Up-scaling organic agriculture to enhance food and water security in South Asia. *Organic Agriculture*, 1-20. <https://doi.org/10.1007/s13165-022-00403-4>
- Ferdous, J., Ahamed, T., Miah, M. M. U., & Rahman, M. M. (2022). Performance of Radish in Aonla based Multistoried Agroforestry System. *European Journal of Agriculture and Food Science*, 4(3), 459.
- Habib, M. A., Mannan, M. A., Karim, M. A., Mamun, M. A. A., Dola, D. B., Miah, M. Y., Miah, M. M. U., Ferdous, J., & Singh, H. P. (2022). Water Deficit Stress Tolerance Assessment in Barley Cultivars Using Drought Tolerance Indices. *Journal of Agriculture and Crops.*, 8(4), 228-235.
- Hasan, J., Shaha, D. C., Kundu, S. R., Ahmed, M., Haque, S. M., Haque, F., Ahsan, M. E., Ahmed, S., Hossain, M. I., & Salam, M. A. (2022). Outwelling of Nutrients into the Pasur River Estuary from the Sundarbans Mangrove Creeks. *Heliyon*, 8 (12), e12270.
- Hasan, J., Shaha, D. C., Kundu, S. R., Yusoff, F. M., Cho, Y. K., Haque, F., Salam, M. A., Ahmed, S., Wahab, M. A., Ahmed, M., Hossain, M. I., & Afrad, M. S. I. (2022). Phytoplankton Community in Relation to Environmental Variables in the Tidal Mangrove Creeks of the Pasur River Estuary, Bangladesh. *Conservation*, 2, 587-612.
- Hoque, M. Z., Ahmed, M., Islam, I., Cui, S., Xu, L., Prodhon, F. A., Ahmed, S., Rahman, M. A., & Hasan, J. (2022). Monitoring Changes in Land Use Land Cover and Ecosystem Service Values of Dynamic Saltwater and Freshwater Systems in Coastal Bangladesh by Geospatial Techniques. *Water*, 14 (15), 2293.
- Hoque, M. Z., Islam, I., Ahmed, M., Hasan, S. S., & Prodhon, F. A. (2022). Spatio-temporal Changes of Land Use Land Cover and Ecosystem Service Values in Coastal Bangladesh. *The Egyptian Journal of Remote Sensing and Space Science*, 25 (1), 173-180.
- Hossain, M. A., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M.M., Khan, M. A. R., Biswas, J. C., & Karim, M.A. (2022). Rice Growth and Yield Characteristics under Elevated Carbon Dioxide and Nitrogen Management. *Agronomy Research*, 20(x),,,,,,-....2022.
- Hossain, M. T., Khandaker, S., Bashar, M. M., Islam, A., Ahmed, M., Akter, R., Alsukaibi, A. K. D., Hasan, M. M., Alshammari, H. M., Kuba, T., & Awual, M. R. (2022). Simultaneous Toxic Cd (II) and Pb (II) Encapsulation from Contaminated Water using Mg/Al-LDH Composite Materials. *Journal of Molecular Liquids*, 368 (B), 120810.
- Islam, I., Cui, S., Hoque, M. Z., Abdullah, H. M., Tonny, K. F., Ahmed, M., ... & Ding, S. (2022). Dynamics of Tree outside Forest Land Cover Development and Ecosystem Carbon Storage Change in Eastern





- Coastal Zone, Bangladesh. *Land*, 11(1), 76.
- Islam, M. A., Uddin, M. M., Rasul, M. G., Swapon, M. A. H., Ahmed, M. & Hasan, M. (2022). In Vitro Screening and Field Performance of EMS-Treated Eggplants for the Selection of Shoot and Fruit Borer-Resistant Plants. *Agronomy*, 12 (8), 1832.
- Islam, N., Shaha, D. C., Hasan, J., Asad, M. H. A., Salam, M. A., Khan, M., Kundu, R. S., & Ahmed, M. (2022). Heavy Metal Pollution Reduced the Potentiality of Pen Culture in the Wetland Aquaculture in an Urban Area of Bangladesh. *Conservation*, 2, 68-79.
- Mahmuda, R., Mondal, S., Rahman, A., Ahmed, M., Parvin, S., & Ahmed, T. (2022). Genetically Modified Crop vs Hybrid Crops and their Impact on Health and Environment. *European Journal of Nutrition & Food Safety*, 14(12), 50-61. <https://doi.org/10.9734/ejnfs/2022/v14i121281>
- Miah, M. G., Islam, M. R., Roy, J., Rahman, M. M., & Abdullah, H. M. (2022). A changing coastal ecosystem: Cox's Bazar in southeastern coastal region of Bangladesh. *Environment Development and Sustainability*, (Accepted on 14/03/2022).
- Miah, M. M. U., Uddin, M. H., Miah, M. G., Rahman, M. M., Ahmed, M., & Matsumoto, M. (2022). Changes of Soil Physical and Chemical Properties in Aonla (*Phyllanthus emblica* L.) based Multistoried Agroforestry System. *Journal of the Faculty of Agriculture, Kyushu University*, 67 (1), 39–51.
- Miah, M. M. U., Uddin, M. H., Miah, M. G., Rahman, M. M., Ahmed, M., & Matsumoto, M. (2022). Changes of Soil Physical and Chemical Properties in Aonla (*Phyllanthus emblica* L.) based Multistoried Agroforestry System. *Journal of the Faculty of Agriculture, Kyushu University*, 67 (1), 39–51.
- Miah, M., Islam, M., Roy, J., Rahman, M., & Abdullah, H. M. (2022). A changing coastal ecosystem: Cox's Bazar in southeastern coastal region of Bangladesh. *Environment, Development and Sustainability*, 1-25.
- Mohi-Ud-Din, M., Hossain, M. A., Rohman, M. M., Uddin, M. N., Haque, M. S., Ahmed, J. U., ... & Pessarakli, M. (2022). Canopy spectral reflectance indices correlate with yield traits variability in bread wheat genotypes under drought stress. *PeerJ*, 10, e14421.
- Morey, B., Deshkar, S., Sukhwani, V., Mitra, P., Shaw, R., Mitra, B. K., Sharma, D., Rahman, M. A., Dasgupta, R., & Das, A. K. (2022). Towards Circulating and Ecological Sphere in Urban Areas: An Indicator-Based Framework for Food-Energy-Water Security Assessment in Nagpur, India. *Sustainability*, 14(13), 8123. <https://doi.org/10.3390/su14138123>
- Obaidullah, A. J. M., Parvin, S., Saha, S. R., Biswas, M. S., Das, S., Ahamed, T., & Sultana, S. (2022). Salinity Stress Effects on Some Morpho-Physiological and Biochemical Traits of Basak. *European Journal of Agriculture and Food Sciences*, doi: <http://dx.doi.org/10.24018/ejfood.2022.4.3.496>
- Pingki, L. S., Ahamed, T., Miah, M. M. U., Khan, M. A. R., & Mondal, S. (2022). Growth and Productivity of Cauliflower in Aonla Based Multistoried Agroforestry System. *Asian Journal of Research in Agriculture and Forestry*, 8(4), 311-321.
- Polly, Miah, M. M. U., Mazed, K., Rahman, M. E., & Yesmin, K. (2022). Effect of Different Plant Hormones on Early Production of Two Commercial Pineapple Varieties in Bangladesh. *European Academic Research*, Vol.X, Issue.
- Rahman, M. M., Kamal, M. Z. U., Ranamukhaarachchi, S., Alam, M. S., Alam, M. K., Khan, M. A. R., Abdullah, H. M.,..... & Ahmed, F. (2022). Effects of Organic Amendments on Soil Aggregate Stability, Carbon Sequestration, and Energy Use Efficiency in Wetland Paddy Cultivation. *Sustainability*, 14(8), 4475.
- Rahman, M. M., Mostofa, M. G., Das, A. K., Anik, T. R., Keya, S. S., Ahsan, S. M., Khan M. A. R., Ahmed, M., Rahman, M. A., Hossain, M. M., & Tran L. S. P. (2022). Ethanol positively modulates photosynthetic traits, antioxidant defense and osmoprotectant levels to enhance drought acclimatization in soybean. *Antioxidants*, 11, 516. <https://doi.org/10.3390/antiox11030516> (IF-6.313).
- Rahman, M. M., Mostofa, M. G., Das, A. K., Anik, T. R., Keya, S. S., Ahsan, S. M., Khan, M. A. R.,



- Ahmed, M., Rahman, M. A., Hossain, M. M., & Tran, L. S. P. (2022). Ethanol Positively Modulates Photosynthetic Traits, Antioxidant Defense and Osmoprotectant Levels to Enhance Drought Acclimatization in Soybean. *Antioxidants*, 11 (3), 516.
- Rahman, M. S., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., & Rahman, M. M., et al. (2022). Incidence and Severity of Rice Sheath Blight Disease under Elevated Carbon Dioxide and Nitrogen Management. *J Plant Biol Agron*, 1(1), 101.
- Rahman, M. S., Mamun, M. A. A., Miah, M. M. U., Haque, M. M., Rahman, M. M., Rubayet, M. T., Biswas, J. C., Karim, M. A., & Miah, M. G. (2022). Rice demands higher nitrogen fertilizer during grain filling stage under elevated atmospheric CO<sub>2</sub> condition. *AJCS*, 16(11), 1234-1242.
- Rahman, M., Hossain, M. S., Amin, M. R., Rahman, M. M., Talukder, M. R. & Ahmed, M. (2022). Growth and Yield Performance of Mustard Varieties under Natural Pest Management Condition. *Ecology Journal*, 4 (1), 37-45.
- Reza, A., Ahamed, T., Miah, M. M. U., & Ahiduzzaman, M. (2022). Growth and Yield of Dragon Fruit in Aonla based Multistoried Fruit Production Model. *European Journal of Agriculture and Food Science*, 4(5), 565.
- Sarmin, N.S. (2022). Spatio-temporal changes of forest and other land covers in the North-eastern Part (Jamalpur & Sherpur) of Bangladesh. *Journal of Biodiversity and Environmental Sciences (JBES)*, 21(5), 120-128.
- Shaha, D. C., Hasan, J., Kundu, S. R., Yusoff, F. M., Salam, M. A., Khan, M., Haque, F., Ahmed, M., Rahman, M. J., & Wahab, M. A. (2022). Dominant Phytoplankton groups as the Major Source of Polyunsaturated Fatty Acids for Hilsa (*Tenualosa ilisha*) in the Meghna Estuary Bangladesh. *Scientific Reports*, 12, 20980.
- Sharmin, T., Parvin, S., Miah, M. M. U., Mondal, S., Sarmin, N. S., Das, S., & Haq, M. A. (2022). Effect of Direction and Distance of Moringa oleifera on Growth and Yield of Cabbage (*Brassica oleracea*). *Asian Research Journal of Agriculture*, 15(4), 190-202.
- Sharmin, T., Parvin, S., Miah, M. M., Mondal, S., Sarmin, N. S., Das, S., & Haq, M. A. (2022). Effect of Direction and Distance of Moringa oleifera on Growth and Yield of Cabbage (*Brassica oleracea*). *Asian Research Journal of Agriculture*, 15(4), 190-202. <https://doi.org/10.9734/arja/2022/v15i4370>
- Uddin, M. Z., Saha, K. K., Moniruzzaman, M., Rahman, M. M., Ahmed, M., & Oliver, M. M. H. (2022). Estimation of Subsurface Pollutant Load and its Seasonal Variation in an Irrigation Channel. *European Journal of Agriculture and Food Sciences*, 4 (6), 54–61.

#### **b) Book/Book Chapter**

- Hasan, M., Abdullah, H. M., Hasibuzzaman, A. S. M., & Ali, M. A. (2022). Date Palm Genetic Resources for Breeding. In *Cash Crops* (pp. 479-503). Springer, Cham.
- Mondal, S., Quddus, M. R., Halder, T., Khan, M. A. I., Zhu, G., Islam, M. R., & Islam, T. (2022). Nanotechnology in developing abiotic stress resilience in crops: A physiological Implication. In *Advancements in Developing Abiotic Stress-Resilient Plants: Basic Mechanisms to Trait Improvements*. (Ed MIR Khan, PS Reddy and R Gupta). Tailor and Francis Group (CRC press), Florida, USA
- Rahman, M. M., Alam, M. S., Islam, M. M., Kamal, M. Z. U., Rahman, G. M., Haque, M. M., Miah, M. G., & Biswas, J. C. (2022). Potential of legume-based cropping systems for climate change adaptation and mitigation. In book: *Advances in Legumes for Sustainable Intensification*. Edited by Meen, R.S. and Sihag, S. (Eds.). Academic Press. Pp. 381-402. <https://doi.org/10.1016/B978-0-323-85797-80.00030-6>
- Saha, S. R., Saifullah, M., Rahman, M. A., & Miah, M. G. (2022). Statistical methods of agricultural research.



### Postgraduate Student's Information

Program	Number
MS	25
PhD	01
Total =	26

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AFE 301	Fundamentals of Agroforestry and Environmental Science	III	4.5	Dr. Md Giashuddin Miah Dr. Md. Main Uddin Miah
Autumn	AFE 350	Silviculture	III	4.5	Prof. Tofayel Ahamed Dr. Md. Abiar Rahman
Autumn	AFE 237	Introductory Agroforestry and Environment	II	4.5	Dr. Satya Ranjan Saha Dr. Shohana Parvin

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
<b>Year 2022</b>					
Summer	AFE 501	Agroforestry Concepts and Practices	MS & PhD	3.0	Dr. Md. Main Uddin Miah Dr. Shohana Parvin
	AFE 521	Environmental Pollution and Protection	MS & PhD	3.0	Prof. Tofayel Ahamed Dr. Noor Shaila Sarmin
	AFE 531	Methods of Agroforestry Research	MS & PhD	3.0	Dr. Satya Ranjan Saha Dr. Md. Abiar Rahman
Autumn	AFE 505	Agroforestry Species	MS & PhD	3.0	Dr. Noor Shaila Sarmin Dr. Shohana Parvin
	AFE 507	Social Forestry	MS & PhD	3.0	Dr. Md. Main Uddin Miah
	AFE 523	GIS and Remote Sensing for NRM	MS & PhD	3.0	Dr. Noor Shaila Sarmin Dr. Hasan Muhammad Abdullah
Winter	AFE 611	Climate Change, Agroforestry and Food Security	MS & PhD	3.0	Dr. Md Giashuddin Miah Dr. Md. Main Uddin Miah
	AFE 512	Farming System	MS & PhD	3.0	Dr. Md. Main Uddin Miah Dr. Satyen Mondal
	AFE 515	Silvicultural Practices in Agroforestry	MS & PhD	3.0	Prof. Tofayel Ahamed Dr. Md. Abiar Rahman
	AFE 541	Agroforestry Components and Interactions	MS & PhD	3.0	Dr. Md. Abiar Rahman Dr. Shohana Parvin
	AFE 601	Tree Physiology	MS & PhD	3.0	Dr. Satya Ranjan Saha Dr. Shohana Parvin



# Institute of Biotechnology and Genetic Engineering (IBGE)

www.bsmrau.edu.bd/btl; www.btlbsmrau.org

## Faculty Members

### Professor

Dr. Md. Tofazzal Islam

Dr. Md. Ashraful Haque

Dr. Md. Mahbubur Rahman

### Associate Professor

Dr. Shah Mohammad Naimul Islam

Dr. Dipali Rani Gupta

### Assistant Professor

Musrat Zahan Surovy

## Officers and Staff

Name	Designation
Md. Nazmul Hasan	Office Assistant cum Computer Operator
S.M.A. Samrat	Lab Technician
Md. Dulal Hossain	Senior MLSS
Md. Ashikur Rahman	Lab Attendant

## MS Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Sharmin Sultana (19-11-5351)	Salicylic Acid Mediated Improvement of Waterlogging Tolerance in Mung Bean.	Dr. Md. Ashraful Haque	Sum/22
Abu Naim Md. Muzahid (19-08-5317)	Development of Blast-Resistant Wheat Variety Through Introgression of Resistant Gene Rmg8 into Bangladesh Elite Wheat Varieties.	Dr. Md. Tofazzal Islam	Sum/22
Sabrina Mamtaz (19-11-5343)	Antioxidant Defense Systems in the Leaves of Wheat Genotypes Carrying Differential Blast Resistance Genes.	Dr. Md. Tofazzal Islam	Aut/22
Afsana Akter Mimma (19-11-5350)	Potential of Metarhizium Anisopliae for Growth Promotion and Suppression of Root Disease Caused by Rhizoctonia Solani of Orka.	Dr. Shah Mohhammad Naimul Islam	Aut/22
Tanjina Akter (19-11-5349)	Fungal Endophyte Beauveria for the Improvement of Rice Growth Performance Under Salt Stress.	Dr. Shah Mohhammad Naimul Islam	Aut/22
Taufica Nusrat (19-11-5345)	Establishment of an efficient in vitro regeneration protocol for Stevia rebaudiana (Bertoni).	Dr. Md. Ashraful Haque	Aut/22
Abdullah Al Mahbub Rahat (20-05-5703)	Preparation and Evaluation of Photocatalytic TiO <sub>2</sub> Nanopesticide Against Magnaporthe oryzae Triticum.	Dr. Md. Tofazzal Islam	Aut/22



### PhD Thesis

Name & Reg. No. of the student	Title of the Thesis	Major Professor	Term of Graduation
Sanjoy Kumar Paul (18-08-4895)	Molecular Diagnosis and Biotechnological Approaches for the Management of Wheat Blast Disease.	Dr. Md. Tofazzal Islam	Win/22

### List of Research Project (Ongoing): Internal/External

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Starting Year
Dr. Md. Mahbubur Rahman	Genomics studies to identify potential genes of a native probiotic bacteria <i>Bacillus pacificus</i> strain CR121 and its role on the gut microbes of tilapia ( <i>Oreochromis niloticus</i> )	MoST	2021
Dr. Md. Mahbubur Rahman	Application of Indigenous Probiotic Bacteria and Seaweed Extracts for Growth and Disease Control of Giant Tiger Shrimp ( <i>Penaeus monodon</i> )	DoF	2022
Dr. Md. Ashraful Haque	Exogenous Application of Abscisic Acid and Jasmonic Acid on Stevia rebaudiana Growth and Development under Heavy Metal Stress	RMC	2022
Dr. Md. Tofazzal Islam	Omics Food and Nutrition Security- Platform Technologies to Enhance Crop Genetic Resource and Food Value Chains in Bangladesh (OFANS)	KGF and Global Institute for Food Security	2022
Dr. Md. Tofazzal Islam	Development of Blast-Resistant Wheat Variety Through Introgression of Rmg8 and RmgGR119 Genes into the Local Wheat Varieties of Bangladesh.	RMC	2022
Dr. Md. Tofazzal Islam	Development of Novel Blast-Resistant Wheat Varieties for Bangladesh by Mutation Breeding.	RMC	2022
Dr. Md. Tofazzal Islam	Molecular Diagnosis, Genome Epidemiology, and Development of Durable Blast Resistant Wheat by Genome Editing.	IAEA	
Dr. Shah Mohammad Naimul Islam	Preparation of biopesticide formulation of <i>Beauveria bassiana</i> , isolated from Bangladesh, effective against <i>Helicoverpa armigera</i> larvae	BAS-USDA 52,04,480/-	2020
Dr. Shah Mohammad Naimul Islam	High throughput functional microbiome sequencing from rice rhizosphere under nitrogen fertilizer management practices	RMW, BSMRAU 10,00,000/-	2021
Dr. Shah Mohammad Naimul Islam	Growth improvement and drought stress mitigation by endophytic fungus <i>Metarhizium</i> in barley ( <i>Hordeum vulgare</i> )	Growth improvement and drought stress mitigation by endophytic fungus <i>Metarhizium</i> in barley ( <i>Hordeum vulgare</i> )	2022

**List of Research Project (Completed): Internal/External (Year 2022)**

Name of PI & Co-PI	Title of the Project	Funding Source with Budget	Completion Year
Dr. Shah Mohammad Naimul Islam	Isolation and molecular characterization of fungal endophytes <i>Epichloe</i> spp. for sustainable crop production	MoST, GoB BDT 200000/-	2022

**List of Seminar/Workshop/Training Attended (Local and foreign) (year 2022)**

Name of the Teacher	Program attended	Date	Country	Role / contribution in the program
Dr. Md. Tofazzal Islam	“Discovery of genome-specific primers for rapid diagnostic of wheat blast fungus <i>Magnaporthe oryzae</i> Triticum using CRISPR-Cas technology”		Dhaka, Bangladesh	
Dr. Md. Tofazzal Islam	“Genomics, postgenomics and open science approaches for tackling a wheat killer on the run”.		The Belt & Road International Collaboration Nanjing Agricultural University, China	
Dr. Md. Tofazzal Islam	“Development of Novel Blast Resistant Variety for Bangladesh by Mutation Breeding”	25-29 July 2022.	Malaysia	
Dr. Md. Tofazzal Islam	“Discovery of genome-specific primers for rapid diagnostic of wheat blast fungus <i>Magnaporthe oryzae</i> Triticum using CRISPR-Cas technology”		Dhaka, Bangladesh	
Dr. Md. Tofazzal Islam	“Genomics, postgenomics and open science approaches for tackling a wheat killer on the run”		The Belt & Road International Collaboration Nanjing Agricultural University, China	
Dr. Md. Tofazzal Islam, Dr. Md. Ashraful Haque, Dr. Md. Mahbubur Rahman	Training and discussion sessions on illumina sequencing technologies in Singapore		Singapore	

**Administrative Duties by the Departmental Members (if any with tenure)**

Name	Position & Address	Duration
Dr. Md. Ashraful Haque	Director (IBGE)	Director (15.04.21-Continue)
Dr. Md. Mahbubur Rahman	Director (Student welfare)	Director ( 12.05. 2022 to date)



## List of Publication by the Members of the Department

### a) Journal

- A-hai Chen, Islam, T., & Zhong-hua, M. A. (2022) An integrated pest management program for managing fusarium head blight disease in cereals. *Journal of Integrative Agriculture*, 21(12), 3434-3444. Impact Factor: 2.848, <https://www.sciencedirect.com/science/article/pii/S2095311922001319>
- Akter, T, Foysal, M. J., Alam, M., Ehsan, R., Paul, S. I., Islam, T., & Rahman, M. M. (2022). Development of formalin killed vaccine candidate against streptococcosis caused by *Enterococcus* sp. in Nile tilapia. *Aquaculture Reports*.
- Akter, T., Ehsan, R., Paul, S. I., Ador, M. A. A., Rahman, A., Haque, M. N., Islam, T & Rahman, M. M. (2022). Development of formalin killed vaccine candidate against streptococcosis caused by *Enterococcus* sp. in Nile tilapia. *Aquaculture Reports*, 27, 101-371. Impact Factor:3.385, <https://doi.org/10.1016/j.aqrep.2022.101371>
- Briste, P. S., Akanda, A. M., Bhuiyan, M. A. B., Mahmud, N. U., & Islam, T. (2022). Morphomolecular and cultural characteristics and host range of *Lasiodiplodia theobromae* causing stem canker disease in dragon fruit. *J Basic Microbiol.*, 62, 689– 700. Impact Factor: 2.281, <https://doi.org/10.1002/jobm.202100501>
- Chakrabarty, S., Chakraborty, P., Islam, T., Islam, A. K. M. A, Datta, J., Bhattacharjee, T., & Xiao, Y. (2022). *Bacillus thuringiensis* proteins: structure, mechanism and biological control of insect pests. In *Bacilli in Agrobiotechnology* (pp. 581-608). Springer, Cham. [https://link.springer.com/chapter/10.1007/978-3-030-85465-2\\_25](https://link.springer.com/chapter/10.1007/978-3-030-85465-2_25)
- Chakraborty, M., & Islam, T. (2022). Antifungal Secondary Metabolites against Blast Fungus *Magnaporthe oryzae*. In: Sayyed, R., Singh, A., Ilyas, N. (eds) Antifungal Metabolites of Rhizobacteria for Sustainable Agriculture. *Fungal Biology*. Springer, Cham. Impact Factor: 2.91, [https://link.springer.com/chapter/10.1007/978-3-031-04805-0\\_2](https://link.springer.com/chapter/10.1007/978-3-031-04805-0_2)
- Chakraborty, M., Munshi, S. K., Islam, T., & Shiddiky, M. J. A. (2022). Potential Transcription Factors for Biotic Stress Tolerance in Sugarcane. In: Wani, S.H., Nataraj, V., Singh, G.P. (eds) *Transcription Factors for Biotic Stress Tolerance in Plants*. Springer, Cham. [https://doi.org/10.1007/978-3-031-12990-2\\_8](https://doi.org/10.1007/978-3-031-12990-2_8)
- Chakraborty, M., Rabby, S. F., Gupta, D. R., Rahman, M., Paul, S. K., Mahmud, N. U., & Islam, T. (2022). Natural protein kinase inhibitors, staurosporine, and chelerythrine suppress wheat blast disease caused by *Magnaporthe oryzae* *Triticum*. *Microorganisms*, 10(6), 1186. Impact Factor: 4.926, <https://www.mdpi.com/2076-2607/10/6/1186>
- Chowdhury, M.Z.H., & Islam, S. M. N. (2022). Bioactive Natural Compounds as Elicitors of Plant Defense Against Bacterial Pathogens. *Int. J. Bus. Soc. Sci. Res.*, 10(1), 44–49.
- Dola, D. B., Mannan, M. A., Sarker, U., Mamun, M. A. A., Islam, T., Ercisli, S., Saleem, M. H., Ali, B., Pop, O. L., & Marc, R. A. (2022) Nano-iron oxide accelerates growth, yield, and quality of *Glycine max* seed in water deficits. *Front Plant Sci.*, 13, 992535 Impact Factor: 6.627, <https://www.researchgate.net/profile/Baber-Ali-7/publication/362928774>
- Haque, M. M., Haque, M. A., Mosharaf, M. K., Islam, M. S., Islam, M. M., Hasan, M., Molla, A. H., & Haque, M. A. (2022). Biofilm-mediated decolorization, degradation and detoxification of synthetic effluent by novel biofilm-producing bacteria isolated from textile dyeing effluent.
- Hoque, M. N., Faisal, G. M., Chowdhury, F. R., Haque, A., & Islam, T. (2022). The urgency of wider adoption of one health approach for the prevention of a future pandemic. *Int. J. One Health*, 8(1), 20-33. Impact Factor: 2.108, [www.doi.org/10.14202/IJOH.2022.20-33](http://www.doi.org/10.14202/IJOH.2022.20-33).
- Hoque, M. N., Rahman, M. S., Islam, T., Sultana, M., Crandall, K. A., & Hossain, M. A. (2022). Induction of



- mastitis by cow-to-mouse fecal and milk microbiota transplantation causes microbiome dysbiosis and genomic functional perturbation in mice. *Animal Microbiome*, 4, 43. Impact Factor: 9.133, <https://animalmicrobiome.biomedcentral.com/articles/10.1186/s42523-022-00193-w>.
- Hoque, M. N., Sarkar, M., Hasan, M., Khan, M., Hossain, M., Hasan, M., Habib, A., Akhter, S., Banu, T. A., Goswami, B., Jahan, I., Nafisa, T., Molla, M. A., Soliman, M. E., Araf, Y., Khan, M., & Islam, T. (2022). Differential gene expression profiling reveals potential biomarkers and pharmacological compounds against SARS-CoV-2: insights from machine learning and bioinformatics approaches. *Front. Immunol.*, Article: 3875. Impact Factor: 8.786, <https://doi.org/10.3389/fimmu.2022.918692>.
- Hossain, A., Rahman, M. M. E., Ali, S., Islam, T., Syed, M. A., Syed, T., & Islam, T. (2022). CRISPR-Cas9-mediated genome editing technology for abiotic stress tolerance in crop plant. *Plant Perspectives to Global Climate Changes*, 331-354. <https://www.sciencedirect.com/science/article/pii/B978032385665200008X>
- Hossain, M. A., Hossain, M. I., Saha, J., Akter, T., Islam, M. R., Rahman, M. M., & Banu M. R. (2022). A comparison of artificial and natural diets for growth and survival of stinging catfish *Heteropneustes fossilis* larvae. *Egyptian Journal of Aquatic Biology and Fisheries*.
- Hossain, M. N., Chowdhury, T. A., Hasan, M., Azim, K. F., Jenny, S., Rabbee, M. F., Rahman, M. M., & Somana, R. S. (2022). Genomic attributes and recent advances in detection of white spot syndrome virus in shrimp: a review. *Marine Biol. Res.*, doi: 10.1080/17451000.2021.2023191
- Hossain, M. T., & Islam, T. (2022). Amelioration of Salinity Stress by *Bacillus* Species as Promoters of Plant Growth in Saline Soil. In *Bacilli in Agrobiotechnology* (pp. 199-208). Springer, Cham. Web address: [https://link.springer.com/chapter/10.1007/978-3-030-85465-2\\_9](https://link.springer.com/chapter/10.1007/978-3-030-85465-2_9)
- Islam, M. A., Ahammed, T., Hoque, M. N., Islam, T., & Noor, S. T. A. (2022). An Estimation of Five-decade Long Monkeypox Case Fatality Rate: Systematic Review and Meta-analysis. *J Pure Appl Microbiol.*, Article 8369, doi: 10.22207/JPAM.16.SPL1.16. Impact Factor:1.053.
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- Islam, M. T., Haque, M. A., Mahmud, N. U., Islam, M. T., & Gupta, D. R. (2022). In vitro compatibility of entomopathogenic fungus, *Cladosporium cladosporioides* with three plant extracts. *Plant Protection Science*. 58(3), 213–219. Impact Factor: 1.464, <https://doi.org/10.17221/135/2021-PPS>.
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- Naser, I. B., Mahmud, N. U., Sarker, A., Hoque, M. N., & Islam, T. (2022). A Highly Salt-Tolerant Bacterium *Brevibacterium sediminis* Promotes the Growth of Rice (*Oryza sativa* L.) Seedlings. *Stresses*, 2(3), 275-289. Impact Factor: 3.493, <https://www.mdpi.com/2673-7140/2/3/20>.
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- Rahman, M. M., Paul, S. I., Rahman, A., Haque, M. S., Ador, M. A. A., Foysal, M. J., Islam, M. T., & Rahman, M. M. (2022). Suppression of Streptococcosis and Modulation of the Gut Bacteriome in Nile Tilapia (*Oreochromis niloticus*) by the Marine Sediment Bacteria *Bacillus haynesii* and *Advenella mimigardefordensis*. *Microbiology Spectrum*, e02542-22.
- Raihan, M. R. H., Rahman, M., Mahmud, N. U., Adak, M. K., Islam, T., Fujita, M., & Hasanuzzaman, M. (2022). Application of rhizobacteria, *Paraburkholderia fungorum* and *Delftia* sp. confer cadmium tolerance in rapeseed (*Brassica campestris*) through modulating antioxidant defense and glyoxalase systems. *Plants*, 11(20), 2738 Impact Factor: 4.67, <https://www.mdpi.com/2223-7747/11/20/2738>
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- Sarker, A., Islam, T., & Kim, J. E. (2022). A pilot lab trial for enhanced oxidative transformation of procymidone fungicide and its aniline metabolite using heterogeneous MnO<sub>2</sub> catalysts. *Environmental Science and Pollution Research*, Impact Factor: 5.19, <https://link.springer.com/article/10.1007/s11356-022-22520-z>
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- Zhang, H. F., Islam, T., & LIU, W. D. (2022). Integrated pest management programme for cereal blast fungus *Magnaporthe oryzae*. *Journal of Integrative Agriculture*, 21(12), 3420-3433. Impact Factor: 2.848, <https://www.sciencedirect.com/science/article/pii/S2095311922001344>



### b) Book/Book Chapter

- Ansary, M. W. R., Sakib, M. H., & Islam, T. (2022). Application of Selenium and Nano-selenium in Abiotic Stress Management, Crop Improvement, and Agro-biotechnology. In: Hossain, M.A., Ahammed, G.J., Kolbert, Z., El-Ramady, H., Islam, T., Schiavon, M. (eds) Selenium and Nano-Selenium in Environmental Stress Management and Crop Quality Improvement. Sustainable Plant Nutrition in a Changing World. Springer, Cham. [https://doi.org/10.1007/978-3-031-07063-1\\_14](https://doi.org/10.1007/978-3-031-07063-1_14)
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### Postgraduate Student's Information

Program	Number
MS	15
PhD	01
Total =	16

### Courses Offered by the Department at Undergraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
Year 2022					
Summer	BTL: 410	Introductory Biotechnology	IV	4.5	-

### Courses Offered by the Department at Postgraduate Level

Term	Course code	Title of the course	Level	Credit	Instructor(s)
Year 2022					
Summer	BTL531	Genetic Engineering	MS	3.0	Dr. Md. Mahbubur Rahman
	BTL510/GPB510	Genetics	MS		-
	BTL602	Cell and Molecular Biology	MS	3.0	Dr. Md. Ashraful Haque
	BTL 633	Microbial Biotechnology	PhD	3.0	Dr. Md. Mahbubur Rahman
	BTL610	Cell Signaling & Communication	PhD	3.0	Dr. Md. Ashraful Haque



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	BTL520	Food and Industrial Biotechnology	PhD	3.0	Dr. Shah Md. Naimul Islam
	BTL530	Bioactive Natural Products	MS	3.0	Dr. Md. Tofazzal Islam
Autumn	BTL632	Advanced Genetic Engineering	Ph D	3.0	Dr. Md. Tofazzal Islam
	BTL-501	Introduction to molecular biology	MS	3.0	Dr. Md. Ashraful Haque
	BTL532	Environmental Biotechnology & Biosafety	MS		Dr. Md. Tofazzal Islam
	BTL 662	Nano biotechnology	Ph D	3.0	Dr. Md. Tofazzal Islam
	BTL534	Fisheries Biotechnology	MS	3.0	Dr. Md. Mahbubur Rahman
Winter	BTL 517	Enzyme & enzyme technology	MS	3.0	Dr. Md. Ashraful Haque
	BTL527	Introduction to Ecological Chemistry	MS		Dr. Md. Tofazzal Islam
	BTL505	Laboratory Techniques in Biotechnology	MS	3.0	Dr. Md. Mahbubur Rahman Dr. Md. Ashraful Haque
	BTL520	Food and Industrial Biotechnology	Ph D	3.0	Dr. Shah Md. Naimul Islam
	BGE604	Bioinformatics	Ph D	3.0	Dr. Shah Md. Naimul Islam Dr. Tofazzal Islam
	BTL661	Biotechnology in Fish Health Management	MS	3.0	Dr. Md. Mahbubur Rahman
	BTL535	Animal Biotechnology	MS		Dr. Md. Mahbubur Rahman
	BTL611	Prebiotic, Probiotic & Postbiotics	Ph D	3.0	Dr. Tofazzal Islam Dr. Md. Mahbubur Rahman
	BTL603	Gene expression and regulation	Ph D	3.0	Dr. Shah Md. Naimul Islam

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## Other's

- Registrar Office
- Research Management Wing (RMW)
- Institutional Quality Assurance Cell (IQAC)
- Outreach Centre
- Students Welfare
- Proctor Wing
- BSMRAU Library
- Plant and Development Section
- Engineering Section
- Audit Cell
- Transport Section
- Public Relation Section
- Dr. M. A. Wazed Mia Central Laboratory



## Registrar Office

[www.bsmrau.edu.bd/registrar/](http://www.bsmrau.edu.bd/registrar/)

### Registrar

Md. Shirajul Islam Talukder, 15/05/2019 to till date

### Officers and Staff

Name	Designation
Md. Abdullah Mridha	Deputy Registrar
Md. Jahangir Alam	Deputy Registrar
Muhammad Abu Al Bashar	Deputy Registrar
Sharmin Naher	Deputy Registrar
Shah Md. Nazrul Islam	Assistant Registrar
Mohammad Shah Alam Mollah	Assistant Registrar
Md. Tofazzol Hossain	Assistant Registrar
A. K. M. Moinuddin	Section Officer
Asma Akter	Section Officer
Md. Suzauddaula	Section Officer
Nazrul Islam	Section Officer
KaziReyadul Hasan	Assistant Hardware Engineer
Abu Saleh Md. QamrulHaq	Imam
Md. Mofiz Uddin	Assistant Store Officer
ShamimaAkter	Administrative Officer
Mohammad Abdullah-Al-Mamun	Administrative Officer
JolakhaKhaton	UDA
Mohammad Hossain	UDA
Md. Hamidur Rahman	UDA
Hafez Syed Faruq Hossain	Senior Moazzin
Md. Harun Or Rashid Khan	Senior Duplicating Machine Operator
Md. Samsul Islam	Office Assistant cum Computer Operator
ANM Foysal Islam	Office Assistant cum Computer Operator
Md. Mostafizar Rahman	MLSS
Md. Rihan Mia	MLSS
Aminul	MLSS
Shalim Miah	MLSS
Rezaul Karim	MLSS
Md. Neaz Morshed	MLSS

### Administrative Activities

1. Publish admission results of the students in BS and Graduate Studies Faculty through Deans/ Academic Section.



2. Accomplish research activities through Director (Research).
3. Accomplish outreach research through Director (Outreach).
4. Appointment of teachers, officers, promotion, leaves of different kinds, regularization, foreign trips, training, retirement, and disciplinary actions.
5. Appointment of deans, heads of divisions, provosts, asst. provosts, directors, proctor and asst. proctors.
6. Appointment of 3<sup>rd</sup> and 4<sup>th</sup> class employees, promotion, leaves, regularization, retirement and disciplinary action.
7. Implementation of university projects, UGC research project, research projects of S&T Ministry.
8. Cooperation and contact with different ministries, and UGC
9. Contact with all public & private universities and other organization.
10. Insurance related works of teachers officers, and staff.
11. Taking necessary actions for various grievances/demands of the teachers, officers, and staff and collection of related information from different universities.
12. Collection and keeping Officer's & 3<sup>rd</sup> and 4<sup>th</sup> class employees' annual confidential reports.
13. Keeping service related records of officers and staff.
14. Administrative activities of the central mosque and graveyard, University cafeteria management.
15. Chalk out programs, coordination and registration of inter university sports & cultural competition.
16. Taking programs for celebrating and observing national days and festivals such as Independence Day, victory Day, celebrating Amar Ekushey, National Mourning Day, Eid ulFtr and Eid ulAdha.
17. Arrange different programs including cultural program for Student' Education Week.
18. Procure and provide all kinds of stationary goods and 3<sup>rd</sup> and 4<sup>th</sup> class employees' dresses through central store.
19. Take care of different litigations, land management, plantation and maintenance.

### Syndicate Meeting

Period	General	Emergency	Total
From 1st till 31.12.2021	93	08	101
2022	04	0	04

### Academic Council Meeting

Period	General	Emergency	Total
From 1st till 31.12.2021	78	57	135
2022	04	01	05

### Employees Information

Particulars	No.		Total
	Male	Female	
No. of Teachers			
i) Professors	67	5	72
ii) Associate Professors	47	18	65
iii) Assistant Professors	34	27	61
iv) Lecturer	10	07	17





No. of Officers			
i) 1st class officer	76	15	91
ii) 2nd class officer	23	10	33
No. of Employee			
i) 3rd class employee	125	14	139
ii) 4th class employee	124	16	140

### Study Leave Information

Particulars	No.		
	Male	Female	Total
No. of teachers in study leave	17	13	30
No. of officer/employee in study leave	0	1	1

### Residential Facilities

Type of Quarter	Number of Building	Total Unit	Number of Family
Utility Flat	1	56	56
A Type	1	8	8
B Type	3	24	23
C Type	5	42	34
D Type	5	40	37
Tin Shead	8	36	36

### Office Equipment Facilities

Items	No.
Computer	19
Scanner	05
Fax machine	01
Photo copper	02

### Training Program Attended

Name of the Employee	Program attended	Date	Organization	Role/contribution in the program
Mohammad Abu Al Bashar	Digital Office Solutions With Google Tools	14-25 March 2022 (Online)	Bangladesh Institute of Management	Participate
Mohammad Abu Al Bashar	Digital Transformation in Government Offices	23-10-22 to 03-11/22 (Online)	Bangladesh Institute of Management	Participate



## Research Management Wing (RMW)

[www.bsmrau.edu.bd/dres](http://www.bsmrau.edu.bd/dres)

### Director

Dr. A. K. M. Aminul Islam, 30-06-17 to date

### Associate Director

Dr. Total Kumar Ghosh

Dr. Mohammad Abdus Salam

### Officers and Staff

Name	Designation
Md. Sabiul Islam	Assistant Registrar
Md. Mithun Mia	Section Officer
Afroza Akter	Senior Assistant
Ali Ahammad	Senior MLSS

### Mission

The mission of the Research Management Wing is “to support the development of research programs of Bangabandhu Sheikh Mujibur Rahman Agricultural University and to provide quality service and effective administrative expertise to the community of the University Research”.

### Objective

The strategic aims of RMC are to develop and enhance research which accepts BSMRAU as Center of Excellence in Agricultural Education and Research.

### Responsibilities

- Conduct Research Program of the University
- Invite Research Project Proposal from the Faculty Members for Funding after Evaluation
- Coordinate Activities of Research Farm Management and Development
- Update the Faculty Members about Funding Opportunities
- Publish University Journal (Annals of Bangladesh Agriculture)
- Monitor Sponsored Projects from National and International Sources
- Promote Technology Transfer throughout the University

### Details of Research Projects Funded by the Research Management Wing

Year	Number of Project	Funding Amount (Tk.)
2017-2018	57	21201000.00
2019-2020	50	17750000.00
2020-2021	42	19428350.00
2021-2022	77	29357750.00
2022-2023 (on going)	105	39083000.00



### Published Books and Journal

Details	Total till to date
Journal (Annals of Bangladesh Agriculture)	25
Abstract Book	19
BSMRAU Technology Book	01
Annual Report Book	06

### Important Crop Varieties and Technologies

Details	Total	Major Crops/Technologies
Crop varieties	67	
Innovative agricultural technologies	14	

### Information on Ongoing Research Projects Funded by Domestic and International Organizations

Funding Source	No. of Projects
PIU-BARC (NATP-2), BARC	02
Krishi Gobeshona Foundation (KGF)	07
Ministry of Education (BANBEIS), GoB	10
BAS-USDA	06
Climate Change Trust Funded	01
Ministry of Science & Technology, GoB	46
University Grants Commission (UGC) of Bangladesh	13
International Rice Research Institute (IRRI)	02
TWAS	01
IFS	01
IAEA (International Atomic Energy Agency)/FAO	01
Grand Total =	90

### Meeting and Workshop

Details	Year 2022
Research Management Committee Meeting	01
Editorial Board Meeting	02
Research Review Workshop	-
Long Term Research Planning Workshop	01
Student Assistantship Selection Meeting	03

### Achievements

- Publication of BSMRAU Journal (Annals of Bangladesh Agriculture) regularly
- Publication of annual report from 2016 to 2021
- Timely disbursement of funds for RMW research projects
- Providing research projects to junior teachers and graduate students
- Organize research review workshop
- Organize long term research planning workshop

**Training Attended**

Name of the Employee	Program attended	Date	Organization	Role / contribution in the program
Md. Sabiul Islam Md. Mithun Mia	ই-গভর্ন্যান্স ও উদ্ভাবন কর্ম পরিকল্পনা বাস্তবায়ন বিষয়ক প্রশিক্ষণ	18 Sept, 2022	IQAC, BSMRAU	Participant
Afroza Akter	তথ্য অধিকার আইন, বিধিমালা, প্রবিধানমালা বিষয়ে কর্মচারীদের প্রশিক্ষণ	28 Sept, 2022	IQAC, BSMRAU	Participant
Md. Sabiul Islam Md. Mithun Mia	জাতীয় শুদ্ধাচার কৌশলপত্রঃ সমস্যা ও সম্ভাবনা শীর্ষক কর্মশালা	22 Oct, 2022	IQAC, BSMRAU	Participant



## Institutional Quality Assurance Cell (IQAC)

www.bsmrau.edu.bd/iqac

### Director

Dr. Md. Abiar Rahman

### Additional Director (ETL)

Prof. Dr. Md. Motaher Hossain

### Additional Director (QA)

Dr. Asif Reza Anik

### Officers and Staff

Name	Designation
Md. Asraful Alam	Assistant Registrar
Md. Moazzem Hossain	Office Assistant Cum Computer Operator

### Training/Workshop/Seminar Arranged in 2022 for IQAC

Topics	No. of Participants	Date	Participants
Training of Scientific Writing Course	25	13-17 February 2022	Lecturers
Workshop on Laboratory Management of BSMARU	41	22 February 2022	Officers & staffs
Orientation to BSMRAU System	29	24 April 2022	New Officers
UGC & BSMRAU APA Inspection and Knowledge Sharing Workshop on NIS	30	11 June 2022	Members of UGC
Orientation Training for Newly Appointed Staffs	54	05 September 2022	New Staffs
Training on Implementation of E-Nothi System at BSMRAU	27	17-18 October 2022	Staffs
Workshop on Teaching Load Calculation	37	13 November 2022	Dean & Head
Training on Statistical Data Analysis	38	27-28 November 2022	Lecture & Assist. Prof.
“জাতীয় শুদ্ধাচার কৌশলপত্রঃ সমস্যা ও সম্ভাবনা” শীর্ষক কর্মশালা	38	22 December 2022	Officers

### Training/Workshop/Seminar Arranged in 2022 for IQAC

Topics	No. of Participants	Date	Participants
ই-গভর্ণ্যান্স ও উদ্ভাবন কর্মপরিকল্পনা বাস্তবায়ন সংক্রান্ত প্রশিক্ষণ -০২ ও ০৩	৪২	২৩ ফেব্রুয়ারি ২০২২	শিক্ষক, কর্মকর্তা



সুশাসন প্রতিষ্ঠার নিমিত্ত অংশীজনের (Stakeholders) অংশগ্রহণে সভা-০১	৩৯	১৫ সেপ্টেম্বর ২০২২	কর্মকর্তা
ই-গভর্ন্যান্স ও উদ্ভাবন কর্ম-পরিকল্পনা বাস্তবায়ন বিষয়ক প্রশিক্ষণ-০১	৪৩	১৮ সেপ্টেম্বর ২০২২	কর্মকর্তা
সেবা প্রদান প্রতিশ্রুতি বিষয়ক প্রশিক্ষণ-০১	৩৩	২৬ সেপ্টেম্বর ২০২২	সিটিজেন চার্টার কর্মকর্তা ও সকল শাখা প্রধান
সেবা প্রদান প্রতিশ্রুতি বিষয়ে আওতাধীন দপ্তরসমূহের ১ম ত্রৈমাসিক সমন্বয় সভা	২৮	২৭ সেপ্টেম্বর ২০২২	বশেমুরকুবির সিটিজেন চার্টার এ উল্লেখিত সেবা প্রদানকারী দপ্তরসমূহের প্রধান ও দায়িত্বশীল কর্মকর্তাগণ
তথ্য অধিকার আইন, বিধিমালা, প্রবিধানমালা বিষয়ে কর্মচারীদের প্রশিক্ষণ	৪৩	২৮ সেপ্টেম্বর ২০২২	৩য় শ্রেণী কর্মচারী
শুদ্ধাচার সংক্রান্ত প্রশিক্ষণ	৩৫	২৯ সেপ্টেম্বর ২০২২	শিক্ষক
সুশাসন প্রতিষ্ঠার নিমিত্ত অংশীজনের (Stakeholders) অংশগ্রহণে সভা-০২	৪৩	২০ অক্টোবর ২০২২	কর্মকর্তা
শুদ্ধাচার সংক্রান্ত প্রশিক্ষণ-০২	৩৫	২৪ অক্টোবর ২০২২	শিক্ষক
ই-গভর্ন্যান্স ও উদ্ভাবনী কর্ম-পরিকল্পনা বাস্তবায়ন বিষয়ক প্রশিক্ষণ-০২	৪৩	২৬ অক্টোবর ২০২২	কর্মকর্তা
সেবা প্রদান বিষয়ে আওতাধীন দপ্তরসমূহের ত্রৈমাসিক সমন্বয় সভা-০২	৩৫	২১ অক্টোবর ২০২২	ডীন ও বিভাগীয় প্রধান
সেবা প্রদান প্রতিশ্রুতি বিষয়ক প্রশিক্ষণ-০২	৩৯	২২ অক্টোবর ২০২২	কর্মচারী
তথ্য অধিকার আইন, বিধিমালা, প্রবিধানমালা বিষয়ে কর্মচারীদের প্রশিক্ষণ-০২	৪১	২৩ অক্টোবর ২০২২	৩য় শ্রেণী কর্মচারী
“জাতীয় শুদ্ধাচার কৌশলপত্রঃ সমস্যা ও সম্ভাবনা” শীর্ষক কর্মশালা	৩৮	২২ অক্টোবর ২০২২	কর্মকর্তা

## Others Information & Activities

On the occasion of the 25th University Day, various banners, festoons, indicators were made and uniforms were distributed to the security personnel and cleaners of the University.



## Outreach Center

[www.bsmrau.edu.bd/doutreach/](http://www.bsmrau.edu.bd/doutreach/)

### Director

Prof. Dr. Emrul Kayesh, 08-07-2021 till to date

### Associate Directors

Dr. Hasan Muhammed Abdullh

Haider Iqbal Khan

### Officers and Staff

Name	Designation
Md. Al-amin Kabir	Assistant Technical Officer

### Activities done in July'21 to June'22

- i. 3 Farmers training
- ii. 3 technology transfer fairs.
- iii. Celebrating Mujib Year.
- iv. 3 technology transfer seminars
- v. 2 national training
- vi. Students' academic visit

### Training/Workshop/Seminar Arranged in July'21 to June'22

Topics	Date
Seminar on "Exploring the utility of drone based multispectral imagery in agricultural research"	16/01/2022
Seminar on "Activities and achievements of Outreach: a tale of a year"	16/06/2022
Seminar on "BSMRAU Outreach Program: Develop Model Village with BSMRAU Technology"	07/11/2021
Farmers training on "Dissemination of the varieties and technology developed by BSMRAU"	06/01/2022
Farmers training on "Fish farming management technology developed by BSMRAU"	08/06/2022
Farmers training on "Livestock and poultry feed, breeding and disease management"	28/03/2022
Training on "Seed health"	01/02/2022
Training on "Apiculture for Livelihood and Biodiversity"	04/03/2022
Free seed distribution program of Celebrating Mujib Year	18/11/2021
Farmers consultation meeting on crop cultivation	30/11/2021
Fair on "BSMRAU released technology and variety transfer"	06/01/2022
Fair on "Cattle and Poultry management"	28/03/2022
Fair on "Fisheries management"	08/06/2022
Free vaccination and treatment of cattle and poultry	30/11/2021

### Other Information

#### 1. List of Facilities

1. Twenty five residential room
2. One training classroom



3. Common room
4. Director's office
5. Guest room
6. Dining room
7. Kitchen
8. Office room

**2. Administrative Activities**

- i. Provide necessary assistance in organizing training and workshops.
- ii. Regular maintenance and management of outreach.
- iii. Collection and recording of the information of university technologies.
- iv. Preparation and publication of annual report.
- v. Supervision and monitoring of the activities of outreach.







## Student Welfare Office

[www.bsmrau.edu.bd/dsw/](http://www.bsmrau.edu.bd/dsw/)

### Director

Prof. Dr. Md. Mahbubur Rahman, 12-05-2022 to till date

Prof. Tofayel Ahamed, 01-02-2021 to 11-05-2022

### Associate Director

Debasish Chandra Acharjee

Dr. Mohammad Ali Zinnah

### Assistant provost (Cultural affairs)

Mahmuda Akter

### Officers and Staffs

Name	Designation
Md. Hafizur Rahman	Deputy Director (Physical Education)
Thahmina Hasan Any	Physical Instructor
Md. Arshad Hossain	UDA
Md. Mofazzol Hossain	Senior MLSS
Md. Rana Ahmed	Groundsman

### Facilities

1. Play ground
2. Begum Sofia Kamal Auditorium (Seat Capacity 860)
3. Old Auditorium (Seat Capacity 270)
4. Gymnasium (Under Renovation)
5. Cultural Rehearsal Room
6. Books and Musical Instruments

### Activities (January to December 2022)

Title	Date
Orientation of Undergraduate (Summer 21-2)2 and Graduate (Winter 21) students	03.02.2022
Swaraswati Puja	05.02.2022
Krishibid Day	13.02.2022
International Mother Language Day	21.02.2022
Historical 7th March	07.03.2022
Annual Sport's Competition	16.03.2022
Birth Anniversary of the Father of the Nation and National Child Day	17.03.2022
Independence Day	26.03.2022
Bangla Noboborsho	14.04.2022



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Participation in TV Debate Completion	15.05.2022
Orientation of Summer	05.06.2022
Football Tournament	18.06.22- 20.10.2022
Death Anniversary of the Father of the Nation	15.08.2022
Participation in Bangabandhu Sports Championship (Football, Chess and Table tennis )	18.09.2022
Shaheed Sheikh Russel Day	18.10.2022
Eid-E-Miladunnabi	09.10.2022
Orientation, Summer	10.10.2022
Prison Murder Day	03.11.2022
Participation in Inter University Football Championship (in PSTU )	11.11.2022
National Agriculture Day	15.11.2022
University Day	22.11.2022
Cricket Tournament	Started on 02.12.2022
Volleyball Tournament	Starts on 06.12.2022
Martyred Intellectual Day	14.12.2022
Victory Day	16.12.2022
Debate competition for awareness against corruption	22.12.2022

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## Proctor Wing

[www.bsmrau.edu.bd/proctor/](http://www.bsmrau.edu.bd/proctor/)

### Proctor

Professor Dr. Md. Arifur Rahman Khan, 01-01-2018 to till date

### Assistant Proctor

Dr. Muhammad Lutfar Rahman, 02-12-2019 to till date

Dr. Sabuj Kanti Mazumder, 01-08-2021 to till date

### Officers and Staff

Name	Designation
Md. Golam Jelani	Deputy Registrar
Md. Rafiqul Islam	Senior Security Officer
Md. Safiqul Islam	Security Officer
Md. Aiyub Ali	Security Assistant
Md. Alamgir Hossain	Data Entry Operator
Billal Hossain	MLSS
Md. Ahasan Habib	MLSS

Proctor office is a part and parcel as well as plays many important roles to maintain the rules and disciplines for running a university smoothly to ensure a quality education. This section was established in the university started from the year of 2000. Now it is situated in the 1<sup>st</sup> floor of TSC building. A proctorial body which consists of one proctor and two assistant proctors, maintains this section of the university. The section is responsible for the discipline and conduct of the students within the university campus outside the residential Halls. The security section of the university worked under the supervision of the proctorial body.

### Activities

- To advise the university student disciplinary committee on the critical and sensitive issues of the students which may hamper the peace and stability of the university.
- To maintain discipline among the student community of the University.
- To keep the office fully geared up to deal with the day-to-day security chores and also to meet out any contingent situation.
- To observe student's activities and also provide strong security activity by setting up IP cameras in different places of the university and
- To protect the wealth and assets of the university.

### Others Information

University security section plays a vital role to ensure the security to the employees and also to protect the property of the university under the close monitoring of proctorial body. Mr. Md. Golam Jelani- Deputy Registrar and Mr. Md. Rofiqul Islam serve as Senior Security Officer and Mr. Md. Safiqul Islam performs as Security Officer. Besides one Security Assistant, eleven permanent guards, three muster roll guards, thirty-five man-day guards and fifty Ansar's deploy in security section



## BSMRAU Library

[www.bsmrau.edu.bd/library](http://www.bsmrau.edu.bd/library)

### Library Chief

Prof. Dr. Abu Nasar Md. Aminoor Rahman

### Officers and Staff

Name	Designation
Md. Atikuzzaman	Deputy Librarian
Md. Alamgir Hossen	Deputy Librarian
Md. Mofazzal Hossain	Senior Cataloguer
Khaleda Jamil	Senior Cataloguer
Abdul Matin Akand	Cataloguer
Md. Moniruzzaman Moni	Cataloguer
Dina	Office Assistant cum-Computer Operator
Md. Iman Ali	Senior Library Attendant
Md. Hazrat Ali	Library Attendant
Md. Abdul Haque	MLSS

### Library Hours:

Library Hours: Sun – Thu (9:00 am - 8:00 pm)

Sat (9:00 am – 5:00 pm)

Closed on Friday

Closed During Holidays

### Description of Books, Journal etc.

Details	Until 2021 (No.)	Year 2022 (No.)	Total (No.)
Books	20853	1006	21859
E-Books	6240	Continue	6240
Bangabandhu Corner	815	50	865
Journals	260 (Vols)	15	275
E-Journals	6700	Continue	6700
Thesis (with CD)	2649	157	2811
TEEAL	164000 (Articles)	Continue	164000 (Articles)

### Library Services:

#### Available Modern Library Facilities

Details	Until 2021 (No.)	Year 2022 (No.)	Total (No.)
ICT Facilities			Wi-Fi based library Service
Cataloging			ILMS -KOHA
Online Public Access Catalog			KOHA based



Circulation			KOHA based
No. of Computer for Students'			Wi-Fi based library Service
Photocopy Services			
Wi-Fi Service	Free Service	Free Service	Free Service
Journal Exchange Programme (Home & Abroad)	100	100	100
On-Line e-Resources	Continue	Continue	Continue
Others			

### Training Program Attended

Name of the Employee	Program attended	Date	Organization	Role/Contribution in the Program
Md. Atikuzzaman	সুশাসন প্রতিষ্ঠার নিমিত্তে অংশীজনের সভা	15/09/22 27/09/22 27/10/22 22/12/22	IQAC (BSMRAU)	Participant
Md. Alamgir Hossen	সুশাসন প্রতিষ্ঠার নিমিত্তে অংশীজনের সভা	15/09/22 & 26-27/09/22	IQAC (BSMRAU) ICDDR B	Participant
Md. Mofazzal Hossain	e-Governance / Stakeholders	18/09/22 20-10-22	IQAC (BSMRAU)	Participant
Khaleda Jamil	e-Governance/ Stakeholders	18/09/22& 20/10/22	IQAC (BSMRAU)	Participant
Abdul Matin Akand	Citizen Charter	23-11-22	IQAC (BSMRAU)	Participant
Md. Moniruzzaman Moni	Citizen Charter	23-11-22	IQAC (BSMRAU)	Participant
Dina	Citizen Charter	28/09/22 22/11/22	IQAC (BSMRAU)	Participant



## Planning and Development Section

www.bsmrau.edu.bd/dpnd

### Director

Prof. Dr. M. Moynul Haque

### Associate Director

Prof. Dr. Md. Ahiduzzaman

### Officers and Staff

Name	Designation
Md. Shamsul Haque	Deputy Director
Muzahidul Islam Sarkar	Assistant Registrar
Md. Mizanur Rahman	Senior Assistant
Md. Nazmul Islam Ratan	MLSS

### Facilities

Development projects of the university are prepared and implemented by Planning & Development section utilizing the fund that are allocated to the university in the annual development program. This section also procure scientific equipment, chemicals, vehicles, furniture and spare parts to increase research and development facilities of the university.

### Activities

During the session 2021-2022, Planning and Development section had performed the following development activities:

### Development Project

Strengthening Physical Facilities and Research Capabilities of Bangabandhu Sheikh Mujibur Rahman Agricultural University (1<sup>st</sup> Revised)

(Tk. in lakh)					
Sl. No.	Component	Estimated Cost	Allocation of financial year (2021-22)	Progress of financial year (2021-22)	Progress up to financial year (2021-22) (%)
1.	Supply & services	200.00	60.00	34.26	52.88
2.	Books and Journals	300.00	138.31	45.12	51.68
3.	Consultancy	308.00	82.69	12.04	75.31
4.	Motor Vehicles	250.75	-	-	100
5.	Laboratory, Scientific Equipment, chemicals & glassware	3565.00	900.00	403.50	85.80
6.	Office Equipment	435.00	175.00	39.11	67.01
7.	Furniture	500.00	140.00	123.29	84.99



8.	Land development	400.00	40.00	31.03	97.58
9.	Construction of 5-Storied International Complex Building with 10 Storied Foundation	1723.10	41.73	380.79	97.33
10.	Construction of 2nd Building for Agriculture Faculty (10-Storied Building with 10 Storied Foundation)	6186.05	384.40	481.84	98.42
11.	Construction of 10-Storied Veterinary Complex Building with 10 Storied Foundation	4635.20	56.85	445.77	95.01
12.	Construction of 4-Storied Security Barrack Building with 4-Storied Foundation	616.00	-	-	100
13.	Construction of 10-Storied New Female Student Hall with 10 Storied Foundation (1500 Female Student)	6902.61	1620.64	1728.16	84.04
14.	Construction of 10-Storied New Male Student Hall with 10 Storied Foundation (1500 Male Student)	7039.39	1558.60	1271.01	80.21
15.	Construction of 10-Storied Utility Flat Building for Teachers with 10 Storied Foundation	2542.15	989.50	835.41	78.59
16.	Construction of 10-Storied Utility Flat Building for Staff with 10 Storied Foundation	2332.00	588.14	277.06	47.34
17.	Construction of 3-Storied Field Laboratory Complex with 3 Storied Foundation (Ex-Situ Living Gene Bank)	550.00	426.48	373.99	80.46
18.	Construction of Vertical Extension (1st To 3rd Floor) of 04-Storied Poultry Shed on Existing 4 Storied Foundation	144.00	-	-	100
19.	Construction of 4-Storied Vehicle Garage Building with 4-Storied Foundation	652.50	7.83	48.27	100
20.	Construction of internal Road	708.00	175.73	128.93	93.13
21.	Construction of R.C.C surface drain	450.00	37.57	37.55	100
22.	Internal Water Supply line and Sanitation works	50.00	4.32	-	100
23.	Gas Line Connection	25.00	25.00	-	-
24.	Supply and Installation of External Electric line	125.00	100.00	114.98	91.98
25.	Roof top solar system 200 kw (20kw x 10 Nos)	492.00	492.00	469.01	95.33
26.	Construction of R.C.C cistern = 40 nos.	78.00	24.83	24.82	100
27.	Pond for fisheries faculty (post graduate research)	100.00	100.00	65.29	65.29
28.	Construction of overhead water tank (100000 gallon capacity) with pump house	200.00	13.38	13.35	100



## Engineering Section

### Officers and Staff

Name	Designation
Md. Ekramul Haque	Chief Engineer
Md. Rakibul Islam	Deputy-Chief Engineer
Mia Md. Yousuf Jamil	Deputy-Chief Engineer (Civil)
Md. Alamgir Hossain Hawlader	Executive Engineer (Civil)
Pahlwan Md. Rafiqul Islam	Executive Engineer (Civil)
Kanchan Kumar Roy	Assistant Engineer (Civil)
Nawaz Sharif	Assistant Engineer (Electrical)
Hadiul Islam	Sub-Assistant Engineer (Civil)
Md. Rakibul Islam	Sub-Assistant Engineer (Electrical)
Md Al-Amin Hossain	Administrative Officer
Md. Shamsul Hoque	Upper Division Assistant (UDA)
Md. Arifur Rahman	Telephone operator
Md. Kamruzzaman	Telephone operator
Md. Maksudur Rahman Atol	Telephone operator
Md. Zahurul Islam	Sr. Electrician
Md. Shahadat Hossain	Electrician
Badrul Alam	Electrician
Md. Abdul Quadir	Sr. Plumber
Md. Akbar Hossain	Plumber
Alamin	Plumber
Shopon Mia	Plumber
Md. Abdul Mannan	Pump operator
Md. Jasim Uddin	Sr. Generator operator
Md. Mizanur Rhman	Generator operator
Md. Nasir Uddin	Generator operator
Md. Shirazul Islam	Sr. Deep-tube well operator
Md. Billal Hossain	Welder
Md. Abdul Razzak Liton	Audio Visual operator
Md. Faruk Hossain	Gas Mistiri
Sojib Chanda Ray	Work assistant
Mokul Chanda Ray	Deep-tube well operator
Sree Souman Chanda Dash	Carpenter
Habibur Rahman	MLSS
Rezaul Karim	Electrical Helper
Sree Shopan Kuma Sipu	Mathor

**Activities (January to December 2022):** Strengthening Physical Facilities and Research Capabilities (SPFRC) of Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Gazipur-1706 Project supervision and monitoring of 2 nos 10-storied Faculty Building, 2 nos 10-storied Student Hall (Male & Female), 2 nos 10-storied Utility Building (Teacher & Staff), International Complex, Ansar barrak, Vehicle Garage, Ex-situ Living Gene-Bank, Over head water tank, Research Pond, Road, Drain. Regular maintenance work of Water supply, Sanitation, Electricity, Gas etc.





## Audit Cell

Audit cell of the university is formed as per the article no. 127-123 of the constitution of the country and orders of the Government of the People's Republic of Bangladesh and authority of the university. Audit cell has been playing significant role for transparent financial expenditure/transaction of the university since 2007 and auditing all the financial transaction as per the financial rules.

### Officers and Staff

Name	Designation
Mohammad Emarot Hossain	Deputy Director
Mohammad Shohidul Islam	Assistant Director
Esrat Jahan	Audit & Accounts Officer
Fatema Nawsin	Audit & Accounts Officer
Fatema Khatun	Computer Operator

### TOR of Audit Cell

#### Work Description

Making arrangement of all kind of external and internal audits of the university.

Preparation of broadsheet reply, arranging tri-and bilateral meetings to address the audit objections.

Audit cell conducts pre-audit of all financial transaction of the university following the audit rules.

Audit cell check the register/records/ledger of the furniture. Apparatus, instruments, teaching materials, books, etc of the offices, hall, departments, library, dormitory etc.

Audit cell helps the concern department/unit to prepare the broadsheet answer of the external audit reports.

Submission of reports to the honorable Vice-Chancellor for further action after making internal audit of the departments, Halls, every offices of the university.

Sending monthly audit objection report to UGC.

### Achievements of the Audit

- i. 16 (Sixteen) audit objections TK 488.86 Lac have been settled during this period.
- ii. A broad sheet reply to audit objections of 2019-2020, 2020-2021 has been sent to Directorate of Education Audit via UGC and Ministry of Education.



## Transport Section

[www.bsmrau.edu.bd/dtran](http://www.bsmrau.edu.bd/dtran)

### Director

Prof. Dr. Md. Azizul Hoque, 01-08-2020 to till date

### Officers and Staff

Name	Designation
Engr. Md. Sadequl Islam	Deputy Chief Engineer
Engr. Mohammad Mosharraf Hossain	Executive Engineer
Mohammad Manirul Islam	Senior Assistant
Md. Zamal Uddin Ahmed	UDA
Md. Nazrul Khan	OA
Md. Zaher Miya	Sr. Driver
Md. Rawsan Ali Khan	Sr. Driver
Md. Abdul Kadir	Sr.Driver
Md. Sirajul Islam	Sr. Tractor Driver
Md. FazlulHaque	Sr. Driver
Md. Billal Hosen	Driver
Md. Mukter Hosen	Driver
Md. Nakiruzzaman	Driver
Md. Zahangir Sheikh	Driver
Md. Nayem Uddin Sarker	Driver
Md. Nayan Hosen	Driver
Sri Bissanath Barman	Driver
Md. Bepul Miya	Driver
Md. Habibur Rahman	Driver
Md. Abu Hanif	Driver
Md. Hafizul Sheikh	Driver
Md. Sohrab Hosen	Driver
Antar Manthin	Driver
Abul Basar Sheikh	Sr. Mechanic
Md. Israfil	Sr. Mechanic
Md. Sultan Ahmed	Mechanic
Md. Mezan	Auto Electrician
Md. Ferdus Mullah	Sr. Helper
Md.Obaidullah	Sr.Helper
Md. Rana Hossain	Helper



## Facilities

### Vehicle

Particulars (Vehicle)	No.	Remarks
Zeep	03	
Car	02	
Ambulance	02	
Microbus	11	
Pic-up	02	
Drum Truck	02	
Minibus	08	
Bus	07	

### Workshop Equipment

Particulars (Automobile Workshop Equipment)	No.	Remarks
OBD Scanner with wi-fi printer	1 set	
Brake Drum & Disk turning Machine	1 set	
Car Washing Revolving Hoist	1 set	
Car Lifter 2-post	1 set	
Computerized ATF Changer	1 set	
Oxy-Acetylene set	1 set	
Welding Transformer set	1 set	
Gas welding Torch	1 set	
Arce Welding Holder set	1 set	
Oil Filter Wrench Cup set	1 set	
Mechanical Hand tools	3 sets	
Electrical Hand Tools	3 sets	

### Committee Meeting

Period	General	Emergency	Total
From 1st till 31.12.2021	38	-	38
2022 (39th Transport Committee Meeting)	-	01	01

### Training Program Attended

Name of the Employee	Program attended	Date	Organization	Role / contribution in the program
Md. Mezan Auto Electrician	Director (IQAC)	28/9/22	IQAC	Information Law.



## Public Relation Section

The conventional job of this section is to disseminate all the information to the general public about all the administrative and development activities of the university including education, research, training and outdoor activities. The public relations section does this work on behalf of the university and serves as an important portal of the University under the direct supervision of the Vice-Chancellor.

### Officers and Staff

Name	Designation
Mr. Md. Mahfuz-ul-alam	Deputy Director (Public Relation) (PRL)
Mr. Md. Moznu Mea	Deputy Registrar
Mr. Md. Shiful Islam	Graphic Art Designer
Mr. Md. Idris Ali	Senior Assistant
Anita Rani Das	MLSS

### Activities 2022

- The Public Relations Section of the University took steps to publish press releases in electronic and print media and news agencies to inform the people about education, research and administrative activities. The number of press releases published during that period was 94.
- Press clippings of news and newsletters published by the Public Relations Section are regularly sent to the office of the Vice-Chancellor which are also displayed on the notice boards and later stored in our archive.
- The section has been directly responsible for the publication of newsletters of various events, meetings, seminars, workshops, training programs or conferences held in the university in newspapers and in the media.
- Under the overall supervision of the Public Relations Section, the Publications Committee of the University has been regularly printing and publishing the bi-monthly mouthpiece of the University 'BSMRAU Barta'.
- In 2022, the wall calendars and pocket diaries of the university have been published and distributed by the Public Relations Branch to all the office holders of the University and allied members. 2000 wall calendars, 1000 desk calendars and 1000 pocket diaries were printed and distributed during that period.
- The department was responsible for publishing all types of advertisements / public notices related to education, research, administrative and development activities of the university in the national dailies with the aim of informing all concerned including students, teachers, officers and employees.

### Electronic Equipment Used by Public Relations Section

- There are 2 desktop computer, 2 printers, 2 DSLR cameras, 1 Scanner in the Department.



## Dr. M. A. Wazed Mia Central Laboratory

[www.bsmrau.edu.bd/dwmcl](http://www.bsmrau.edu.bd/dwmcl)

### Directors:

Professor Dr. Totan Kumar Ghosh, 09-09-2022 to till date

Prof. Dr. Md. Main Uddin Miah, 01-08-2020 to 08-09-2022

### Associate Directors

Dr. Mohammad Shah Alam, 01-08-2021 to till date

### Officers & Staff

Name	Designation
Md. Shahadat Hossain	Section Officer
Sujan Kumar Das	Assistant Instrument Engineer (Electronics)
Md. Shajedul Islam	Technical Officer
Amrita Rani Das	Assistant Technical Officer
Anupa Sarker	Lab Assistant
Imran Ahmed	Lab Technician
Md. Abdul Kader Howlader	Senior Cook
Kanika Rani Das	MLSS

### Activities (Year 2022)

- Installation of Instruments for Food Safety & Processing Laboratory
- Analysis: ICPMS, GCMS, HPLC, Protein, Nutrients, Freez Drying.
- System Integration of Eddy Co-variance System
- Renovation works in Advanced Analytical Laboratory (Room#204)
- Machine repairing technical support
- Foreign & Local training
- Procurement of necessary chemicals, reagents, glassware and other necessary tools

### Facilities (Year 2022)

The Central Laboratory provides the following facilities:

- Analytical Lab
- Food Safety Lab
- Food Processing Lab
- GIS & Remote Sensing Laboratory
- Digital Herbarium
- Herbal Museum
- Biotechnology Lab
- Seed Gene Bank
- Plant Disease Diagnostic Clinic Laboratory



- Environmental Hazard and Disaster Management Laboratory
- Seminar Room for Climate Change Center for Research and Education

### Description of Equipment's

Details	Until 2021 (No.)	Year 2022 (No.)	Total (No.)
Lists of Equipments are given below	125	17	142

### List of Equipment (Until 2021)

Sl. No.	Name of the Equipment	Quantity
01	Analytical Balance	01
02	Top Loading Balance	01
03	Water Bath	01
04	Magnetic stirrer with Hot Plate	01
05	Vortex Mixture	01
06	Ice Flake machine	01
07	Ultrapure Water Purification System	01
08	Vertical Gel Electrophoresis Unit	01
09	Microwave Oven	01
10	Spectrophotometer	01
11	Benchtop pH Meter	01
12	Autoclave	02
13	Stereo Microscope with camera	01
14	Homogenizer	01
15	Micro Pipette	10
16	Low temperature Shaking Incubator	01
17	PCR (Thermal Cycler)	01
18	Gel Documentation with PC	01
19	Liquid Nitrogen Container 10L	01
20	Humidifier	02
21	Refrigerator	01
22	Kjeldahl Digestion & Distillation Unit	01
23	Working Station	02
24	Drum Scanner (Small)	01
25	Drum Scanner (Large)	01
26	Map Plotter with Paper (42" - 48")	01
27	Laser Printer Colored	02
28	Laser Printer Black & White	01
29	Photo Printer	01
30	GPS	01
31	Laptop For Data transfer	01



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32	Photocopier	02
33	Gas Chromatography Mass Spectrometry (GC-MS)	01
34	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	01
35	Near Infra Red(NIR) Analyzer	01
36	Microwave Digester	01
37	Electric Balance	01
38	Homogenizer	01
39	Laboratory Mill Grinder	01
40	Ultrapure water purification system	01
41	Solid Phase Extractor	01
42	High Performance Liquid Chromatograph (Gradient system)	01
43	High Performance Liquid Chromatograph (Isocratic system)	01
44	Gas Chromatograph with ECD detector	01
45	Gas Chromatograph with FID detector	01
46	Automatic peeling and coring machine	01
47	Slicing machine	01
48	SS steam vertical Retort	01
49	Juice extractor machine	01
50	Automated packaging machine	01
51	Vacuum sealing machine	01
52	Pasteurizer	01
53	Temperature and humidity controlled cold chamber	01
54	Texture analyzer	01
55	Digital refractometer	01
56	Vaccum dryer	01
57	Vaccum fryer	01
58	Automatic Banana slicer	01
59	Humidic chamber	01
60	Hot water tank with conveyor belt	01
61	Peeler	01
62	Blancher	01
63	Cooker	01
64	Drum dryer	01
65	Cabinet dryer	01
66	Grinder/crusher	01
67	Potato pulp dryer	01
68	Starch extractor	01
69	Dryer	01
70	Muffle furnace	01

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71	Soxhlet apparatus	01
72	Pipette controller with wall support	02
73	Automatic burette with intermediate stopcock	02
74	PCR with agarose gel electrophoresis system	01
75	Digital Bottle-top dispenser (1-10 ml) with safety prime	01
76	Digital Bottle-top dispenser (5-50 ml) with safety prime	01
77	Micro pipette	01
78	Pico-Tag workstation	01
79	Anaerobic chamber	01
80	Rotary evaporator	01
81	Laboratory Ice maker system	01
82	Biological Safety cabinet	01
83	Fume hood	01
84	Refrigerated microcentrifuge	01
85	Non-refrigerated centrifuge	01
86	Freeze Dryer	01
87	Protein electrophoresis and blotting System	01
88	Ultrasonicator	01
89	Homogenizer	01
90	Laboratory Refrigerator	03
91	Freezer (-26C)	01
92	Refrigerator	02
93	Vortex mixer	02
94	Membrane filtration unit	01
95	Hot plate with magnetic stirrer	02
96	pH meter	02
97	Orbital shaker	01
98	Distillation and mili-Q water system	01
99	Kjeldahl apparatus	01
100	Oven	04

### List of Equipment (Year 2022)

Sl. No.	Name of the Equipment	Quantity
01	Complete Eddy Covariance Systems	01
02	Automated Soil Gas Flux System (L1-8100A)	01
03	ASD4 Field SpecSpectroradio meter (300-2500nm)	01
04	Spectralon	01
05	GPS Receiver	01
06	GPS Antenna	01
07	Direct soil pH measurement Kit	01






08	Balance (4 Digit)	02
09	Balance (3 Digit)	02
10	Balance (2 Digit)	02
11	Micro-Pipette (5, 1, 0.5, 0.2, 0.1, 0.01, 0.002 ml)	01
12	Vortex (3 types)	01
13	Ice Maker	01
14	Micro-wave oven	01

### Training Program Attended

Name of the Employee	Program attended	Date	Organization	Role/contribution in the program
Sujan Kumar Das, Assistant Instrument Engineer (Electronics)	Technical & Operational Training on GCMS & ICPMS	06/12/2022 to 14/12/2022	Perkin Elmer, India	Trainee
Md. Shajedul Islam, Technical Officer	Technical & Operational Training on GCMS & ICPMS	06/12/2022 to 14/12/2022	Perkin Elmer, India	Trainee



## Hall's

- Shaheed Tajuddin Ahamad Hall
- Shaheed Ahsan Ullah Master Hall
- Bangamata Sheikh Fazilatunnesa Mujib Hall
- Ila Mitra Hall
- Female Hall (Temporary)





## Shaheed Tajuddin Ahamad Hall

[www.bsmrau.edu.bd/stah](http://www.bsmrau.edu.bd/stah)

### Provost

Dr. Dinesh Chandra Shaha, 08-07-2021 to till date

### Assistant Provost

Dr. Md. Shakhawate Hossain, 11-02-2021 to till date

Dr. Minhaz Ahmed, 01-11-2021 to till date

Dr. Muhammad Ziaul Hoque, 11-02-2021 to till date

Md. Moniruzzaman, 02-05-2021 to till date

### Officers and Staff

Name	Designation
Md. Golam Kibria	Upper Division Assistant
Shamim Al Mamun	Cook
Md. Shariful Islam	Senior Dormitory Attendant
Md. Mokbul Hossain	Senior Dormitory Attendant
Md. Nurul Islam	Senior Dormitory Attendant
Md. Samsul Huq	Senior Dormitory Attendant
Md. Babul Akter	Senior Dormitory Attendant
Md. Solayman	Senior Attendant
Md. Dalour Hossain	Senior Guard
Md. Rakib Hossain	Guard
Md Aminul Islam	Guard
Md. Amir Hossain	Gardener

### Student Information

Year	Term	Residential		Non residential	Total
		MS	PhD		
2021	Winter	170	10	--	180
	Summer	135	16	--	151
	Autumn	149	10	--	159

### Dining management

A mess is running for lunch & dinner by a student committee (named as dining committee) under the supervision of hall administration. This system provides standard and quality foods with affordable price as fixed by the dining committee.

### Celebration of national day

The hall actively takes part in the celebration of national day like bangali new year, the international mother language day, the national child day, the independent day, the intellectual day, the victory day, birth anniversary of Shaheed Tajuddin Ahmad first prime minister of Bangladesh and other national and



international days announced by the government of people's republic of Bangladesh every year. The hall also observes the national mourning day and death anniversary of Shaheed Tajuddin Ahmad.

### **Sports and Games**

The hall provides all necessary facilities for both indoor (badminton, table tennis, carom, chess, cards, etc.) and outdoor (cricket, football, volleyball etc.) games. The play ground in front of the STA hall. Is used by the student for recreation.

### **Religious activities**

There is a spacious mosque in the hall for five-time prayer. About 200 students can pray at a time. The student of others religious background also perform their activities with the consent of the hall administration.

### **Gardening**

There is a beautiful garden in front of the hall. Different seasonal and perennial flowers blossoms give the hall a colorful view all the year-round. Last year the hall authority established a mixed fruit orchard in the backyard of the Hall.

### **Tree plantation**

The 'National Tree Plantation Campaign' a perform the students of Tajuddin Ahmad Hall often take part in the program. The students of this hall plant many saplings of different fruit trees like mango, pomelo, coconut, jackfruit etc, inside the hall premises.

### **ICT Infrastructure**

The hall has Wi-Fi network to provide the internet facilities of the students.

### **Hall Discipline**

The hall is well disciplined for the students. The entry of the students is restricted after 11:00 pm and restricted for out comers and visitors for 24 hrs. The hall maintains an entry book in the main gate for out comers and visitors. The guests have to entry their name and other necessary information in the entry book.

### **Hall Security**

The hall administration has set up an IP camera into the hall gate to observe and monitor the security system. The hall administration has provided 24 hours security for the students.

### **Common Room**

The University provides 8 daily newspaper (2 English and 6 Bangali) for the students along with a large LED TV.

### **Telephone Facilities**

The University has provided three intercom telephone along with PABX facility in the provost office, office section and security room of hall gate.

### **Canteen**

The hall authority has arranged a fine small canteen with breakfast, snacks and other daily needs for the students.





## Shaheed Ahsan Ullah Master Hall

[www.bsmrau.edu.bd/samh](http://www.bsmrau.edu.bd/samh)

Shaheed Ahsanullah Master Hall is situated at the north-west part of the BSMRAU campus. The hall is very unique of its kind as with other universities of the country. The entrance of the hall is decorated with different green plants and flowers that are really pleasing and over whelming. Gentle breeze and ample sunshine play together bathing the students and keep them fresh always even when they study hard. Under the proper guidance of the hall administration, the students enjoy homely environment in the hall. Students of different cultural background and religious worship live together in harmony and maintain a peaceful hall life. The Hall has accommodation capacity for 540 students and at present 573 students of different faculties is living in the hall.

### Provost

Dr. Md. Taimur Islam, 08-07- 2021 to till date

### Assistant Provost

DR. Md. Sayedul Islam, 01-05-2021 to till date

DR. Md. Rashidul Islam, 21-10-2021 to till date

Dr. Satyen Mondal, 13-10-2022 to till date

Uttam Kumar Ghosh, 23-02-2023 to till date

Md. Ruhul Amin, 23-02-2023 to till date

### Officers and Staff

Name	Designation
Muhammad Ali Akbar	Administrative Officer
Md Hassan Ali	Senior Cook
Md. Abdur Rahim	Senior Cook
Md. Kamal Uddin	Senior Dormitory Attendant
Md. Amir Hossain	Senior Gardener
Md. Eleas Miah	Senior Dustman
Sree Prodip Basfor	Senior Sweeper
Sree Sajib Basfor	Sweeper
Md. Mejbaul Hassan	Senior Guard
Md. Nazrul Islam	Guard

### Students Information

Year	Term	Residential	Non residential	Total
2021	Summer	573	-	573
	Autumn	573	-	573
	Winter	573	-	573

### Dining Management

Under the active supervision of the hall administration, a dining monitoring committee is formed, comprising two assistant provost and twelve representative students from different faculties and years. This committee



is responsible to form dining management committee to provide quality foods at affordable prices for the lunch and dinner only. Students help run the dining smoothly. A separate arrangement has also made for the breakfast and snacks in the afternoon which are operated by the employees of the hall.

### **Celebration of national day**

The hall actively takes part in the celebration of national day like Bangla new year, the international mother language day, the national child day, the independent day, the intellectual day, the victory day, birth anniversary of Shaheed Ahsan Ullah Master MP and other national and international days announces by the government of people's republic of Bangladesh. The hall also observes the national mourned day and death anniversary of Shaheed Ahsan Ullah Master MP every year.

### **Sports and Games**

The hall provides all necessary facilities for both indoor (badminton, table tennis, carom, chess, cards, etc.) and outdoor (cricket, football, volleyball etc.) games. The hall organizes intra-hall indoor games (badminton, table tennis, carom, chess, cards, etc.) tournament every year. The central play ground is in front of the SAM hall. The students use to play there in every afternoon and all long during the holidays.

### **Cultural activities**

The students of the hall participate every cultural activities and cultural competitions arranged by the University. The hall celebrates the reception ceremony of the new comers every year. Moreover, every year the hall organizes farewell ceremony for the graduated students.

### **Religious activities**

There is a spacious mosque in the hall for five-time prayer. About 180 students can pray at a time. A number of religious books were procured and placed in the mosque for the students to enrich their religious knowledge. The student of others religious background also observe their activities with the consent of the hall administration.

### **Gardening**

There is a beautiful garden in front of the hall. Different seasonal and perennial flowers blossoms give the hall a colorful view all the year-round. Last year the hall authority established a mixed fruit orchard in the backyard of the Hall.

### **Tree plantation**

To make the 'National Tree Plantation Campaign' a success, the students of Shaheed Ahsan Ullah Master Hall takes part in the program. Student of this hall plant many saplings of different fruit trees like mango, pomelo, coconut, jackfruit and other fruit trees inside the hall premises. The program is supported by the University Tree Plantation committee.

### **ICT Infrastructure**

The hall has 24 hour Wi-Fi network to provide the internet facilities for the students. For the security of the hall, twenty eight (28) C.C. TV camera has been installed at several important places of the hall.





### **Hall Discipline**

The hall is well disciplined for the students. The entry of the students is restricted after 11:00 pm and it is restricted for out comers and visitors for 24 hrs. The hall maintains an entry book in the main gate for out comers and visitors. The guests have to entry their name and other necessary information in the entry book.

### **Hall Security**

The hall administration has set up an IP camera into the hall gate to observe and monitor the security system. The hall administration has provided 24 hours security for the students.

### **Common Room**

The hall provides 7 daily newspaper (2 English and 5 Bangali) for the students along with a large LED TV.

### **Guests/Visitors Room**

The hall authority have furnished a visitor's room in the hall for parents and guardians who visit frequently to see their beloved sons and relatives.

### **Telephone Facilities**

The University has provided three intercom telephone along with PABX facility in the office room of the provost, office section and security room of hall gate.

### **Corner Shop**

The hall authority has arranged a fine small corner shop with snacks and other daily needs for the students.



## Bangamata Sheikh Fazilatunnesa Mujib (BSFM) Hall

[www.bsmrau.edu.bd/bsfmh/](http://www.bsmrau.edu.bd/bsfmh/)

### Provost

Dr. Farhana Haque, 03-07-2019 to till date

### Assistant Provost

Dr. Md. Shamim Hossain, 20-03-2019 to till date

Dr. Foyes Ahmed Prodan, 18-11-2021 to till date.

Munny Akter, 07-11-2019 to till date

Dr. Afsana Hossain, 03-04-2022 to till date

Tasmina Akter, 01-05-2021 to till date

### Officers and Staff

Name	Designation
Esmat Ara Mitu	Senior Assistant
Md. Hatem Ali	Senior Cook
Md. Anowar Hossin	Mali
Shapna Rani	MLSS
Md. Jahir Uddin	Senior Guard
Md. Abdus Salam	Senior Guard

### Students Information

PhD Students	MS Students	BS Students	Foreign Students	Total
02	113	290	22	427

### Different Facilities of BSFM Hall

#### Dining management:

There is a dining facility for lunch and dinner for residential students. Dining runs by the students dining management group, where one group consists by four students (named as dining manager) under the active supervision of the hall administration. A dining monitoring committee is also formed comprising 16 students from different faculties and from different levels. The committee is responsible to provide quality food at affordable prices for the students.

#### Hall discipline:

The hall is well disciplined for the students. The entry of the students is restricted after 6:30 pm for October to March and 7:00 pm for April to September. It is strictly restricted for out comers and visitors for 24 hrs.

#### Hall security:

The hall administration has set up an IP camera into the hall gate to observe and monitor the security system. The hall administration has provided 24 hours security for the students.

#### Guests/visitors room:

The hall authority furnished visitor's room in the hall for parents and guardians who visit frequently to see their daughters and relatives.





**ICT infrastructure:**

The hall has covered with Wi-Fi network to provide the internet facilities for the students of staffs.

**Religious activities:**

There is a prayer room in the hall used for five-time prayer. Besides, many other religious festivals are observed in the hall each year.

**Other activities and facilities:**

Many indoors games (table tennis, carom, chess, card, badminton, ludu, etc.) are arranged in the hall in every year. Some cultural activities are also observed in the hall. There is a separate newspaper reading space where six dailies are available for the students. There is a separate canteen for having breakfast and a nice corner shop for other daily necessary items. Besides, students are provided a marvelous television in a big common room for their refreshment.





## Ila Mitra Hall

[www.bsmrau.edu.bd/imh/](http://www.bsmrau.edu.bd/imh/)

### Provost

Dr. Noor Shaila Sarmin, 01-03-2022 to till date

### Assistant Provost

Dr. Fahima Khatun, 01-08-2021 to till date

Dr. Afzal Sheikh, 01-05-2021 to till date

Md. Tuhinur Rahman, 01-05-2021 to till date

Mousumi Das, 12-01-2022 to till date

### Officers and Staff

Name	Designation
Nusrat Jahan Rupa	Office Assistant
Md. Abdul Mannan	Senior Cook
Abul Hossian	Senior Cook
Narin Jahan Happy	Dormitory Attendant
Urmi Rani	Sweeper
Anoara Begum	Senior Dormitory Attendant
Hawa Bibi	Senior Dormitory Attendant
Ismail Hossain	Guard
Faruk Hossain	Guard
Habibur Rahman	Guard

### Number of Student

BS Students	MS Students	PHD Students	Foreign Students	Total
232	94	6	00	332

### Dining Management

A group of 4 students manage dining for every 15 days. In fact, every student has to come in the dining management group in their 4 years undergraduate course level. Hall administration monitors the dining management and formed the group and follow up the food quality frequently. At the end of each dining group, special menu is arranged for border. There is a canteen in the hall where breakfast and afternoon snacks are available for student refreshment.

### Sports and games

Every year the hall administration arranges different kinds of indoor games competition for the students. The champion and runner up will get the prize which is hand overed by arranging a colorful prize giving ceremony where the Vice-chancellor presents as a chief guest.

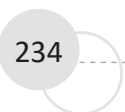
### Common room and Guest room

There is a common room for the students inside the hall with some facilities, such as television, newspaper, carom, table tennis etc. Besides, there is a guest room at the entrance of the hall gate, and guardians can wait for the students in the guest room during their visit.



### **Other activities and facilities**

The hall administration participates in different national program and festivals following the University administration along with the students. As for example Mother language day, Independence Day, Pohela Baishak, National Mourning Day, Victory Day etc. The hall administration arranges four newspapers including one English (Prothom Alo, Jugantor, Ittefaq, and The Daily Star) for the students in each block.





## Female Hall (Temporary)

### Provost

Dr. Satya Ranjan Saha

### Assistant Provost

Murshida Khan

Dr. Shaikh Sharmin Siddique

Mst. Umme Habiba

### Officers Staff

Name	Designation
Aklima Akther	Office Assistant cum Computer Operator
Murad Hasan	MLSS
Dulal Mia	Senior cook
Sree Shikha Rani	Sweeper

### Students Information

BS Students	MS Students	PhD Students	Foreign Students	Total
203	00	00	00	203

### Activities

Some activities were performed by the Female hall (Temporary) during the period from January to December 2022. These are given below:

1. Dining tables were furnished with tablecloths.
2. Two exhaust fans were installed at the kitchen.
3. Drainage system has been renovated.
4. Resident students actively participated at the Annual Sports-2022 and secured some prizes.
5. Front stair base of one building has been renovated.
6. Establishment of a mini flower garden inside the hall.
7. Two ultima water filter were installed separately in two building.



## Highlights of 2022

- 7<sup>th</sup> March (Historic Day)
- 17<sup>th</sup> March (National Children's Day & Birthday of Father of the Nation)
- Graduate Research Assistant Selection Meeting
- RMC Meeting 2022
- 21<sup>st</sup> February (International Mother Language Day)
- 26<sup>th</sup> March (Independence Day)
- Death Anniversary of Shaheed Ahsan Ullah Master
- Krishibid Dibosh 2022
- Bangabandhu Research Chair Selection Meeting
- 93<sup>rd</sup> Birthday of Bangamata
- MoU Signing: BSMRAU - Saskatchewan
- 15<sup>th</sup> August (National Mourning Day)
- E-governance Training
- 14<sup>th</sup> December 2022
- 16<sup>th</sup> December (Victory Day)
- Farmers Training
- Consultation Meeting BSMRAU-GIFS
- Seed Distribution
- Orientation Program (MS & PhD)
- Birthday of Sheikh Russel
- University Day 2022
- Graduation Day 2022
- Tree Plantation 2022
- Bangabandhu Swadesh Prottaborton Dibosh
- Annual Sports 2022



7 March 2022



17 March 2022



Graduate Research Assistant Selection Meeting

RMC Meeting 2022



21 February 2022





26 March 2022



Placed Floral Wreaths at the Grave of Shaheed Ahsan Ullah Master



Krishibid Dibosh 2022



Bangabandhu Research Chair Selection Meeting



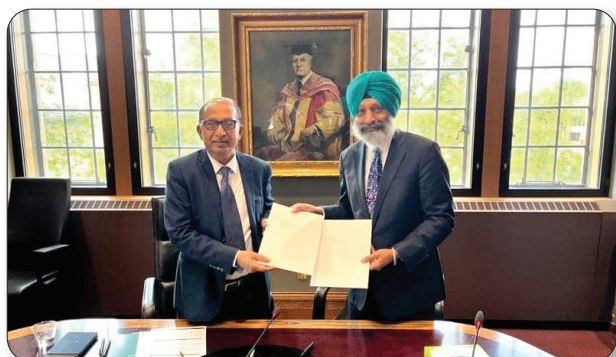
93<sup>rd</sup> Birthday of Bangamata



MoU Signing: BSMRAU - Saskatchewan



15<sup>th</sup> August (National Mourning Day)





### E-governance Training



### 14 December 2022



### 16 December 2022



### Farmers Training



### Consultation Meeting BSMRAU-GIFS



### Seed Distribution



### Orientation Program (MS & PhD)







### Birthday of Sheikh Russel



### University Day 2022



### Graduation Day 2022



### Tree Plantation 2022



### Bangabandhu Swadesh Prottaborton Dibosh



### Annual Sports 2022



