

NOAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY, Noakhali

Project Title: Climate-resilient aquatic food systems for healthy lives of young women and girls in Bangladesh (AQUAFOOD) funded by DANIDA

Call for Applications

Two PhD Scholarships Available under Work Package 3 & 4 (WP3 WP4)

The AQUAFOOD project is inviting applications for a total of 4 PhD scholarships. Two scholarships under WPs 3 & 4 details can be found on the webpage of Noakhali Science and Technology University (<https://nstu.edu.bd>), while the remaining two scholarships details are available under other WPs 3 & 4 on the website of Bangladesh Agricultural University (<https://bau.edu.bd>).

PhD Scholarship #1 NSTU

Health and nutrition of young females living in aquatic food systems – a cohort follow-up study

Background: Aquatic food consumption is a source of essential nutrients for healthy growth and development. Health and nutrition of young females is particularly critical to ensure they reach their developmental potential as well as being physically fit for eventual pregnancy and birth. Bangladesh is one of the most vulnerable nations to the impacts of global climate change, and the poor living in the coastal aquaculture farming communities are directly at risk. The PhD project is an integrated part of the AQUAFOOD project, which aims is to generate new knowledge about the export-driven, aquatic food systems of coast-to-inland ecosystems of Bangladesh, in the context of climate change.

The PhD research builds on developing a survey design of revisiting young women previously assessed in 2017-2018, at that time adolescent girls age 12-16 years. We hold nutrition and health data from a bi-seasonal survey of 300 girls, investigating multiple correlations of nutritional status, including aquatic food consumption and female autonomy.

The main research activities for the PhD study are

- Together with the project research team, the PhD will contribute to design and take lead in implementing a survey investigating the nutrition and health of young females living in coastal aquaculture farming communities, by revisiting a sub-sample of the 2017-2018 adolescent girl cohort of now young women. The survey will include the babies the women may have given birth to. Also, a new sample of adolescent girls will be included to add to the understanding of changes over time. A protocol describing the study details will be developed for ethical clearance.
- The assessment will include parameters for nutritional status (including biological markers), marriage status, child-birth, female autonomy score, and current and retrospective aquatic food consumption. Perception and practices related to climate-change will be included in the assessment.

- The field survey activities will be coordinated with research activities carried out by other PhD students in the AQUAFOOD project. This data is a unique opportunity to investigate correlations between perception and adaptation to climate change, and associations with health and well-being of the now young women.

The PhD study will be co-supervised by Dr Abdullah-Al Mamun, and Ruhul Kabir, Noakhali Science and Technology University, ([NSTU](http://www.nstu.edu.bd)), Dr. Nanna Roos, University of Copenhagen, Denmark, (<https://nexs.ku.dk/english/staff/?pure=en/persons/175594>), Dr. Baukje de Roos, University of Aberdeen, UK (<https://www.abdn.ac.uk/people/b.deroos>) Dr. Richard Newton, and Dr. David Little from the University of Stirling, UK

The PhD will cover up to **two travels** for a total stay of **Minimum 6 months** study stay with the European (**UK and Denmark**) project partner universities for supervision and collaborative research activity.

Stipend: Monthly stipend will be given as per project rules.

Essential Qualification:

- Hold a master degree in life sciences/nutrition/public health
- Interest and preferable experience in conducting field work involving humans, digital tools for data collection

Please refer to the nstu (www.nstu.edu.bd) website for specific qualification, enrollment fee and process.

Desirable Experiences and skills: The candidate is expected to be flexible and collaborating with the project team and other PhD students in the AQUAFOOD project, and adapt research approaches for mutual benefits and project coherence. All PhD students (from other work packages) in the AQUAFOOD project will be involved in collaboratively designing the studies, collecting field data and in gathering and sharing the data

PhD Scholarship 2 (NSTU)

Linking aquatic food production, consumption and health: Advancing the assessment methodology of using biomarkers

Background: Aquatic food consumption is a source of essential nutrients for healthy growth and development. Bangladesh is one of the most vulnerable nations to the impacts of global climate change, and the poor living in the coastal aquaculture farming communities are directly at risk. The PhD project is an integrated part of the AQUAFOOD project, which aims is to generate new knowledge about the export-driven, aquatic food systems of coast-to-inland ecosystems of Bangladesh, in the context of climate change.

The PhD research will focus on advancing and validating tailored and more robust and precise assessments methods for the assessment of aquatic food consumption, using digital tools and biomarkers. More than 250 fish species in Bangladesh are commonly consumed, and an individual diet over a year may include more than 60 different species. The nutritional value of fish differ between species and depends on the post-harvest cleaning and processing, and the current understanding of the relation between aquatic food intake and health is limited by the ability to measure actual intake.

The main research activities for the PhD study are

- Together with the project research team, contribute to designing a digitalized dietary assessment tool for aquatic foods on species level. Photo-based species identification together with tools for portion size estimates will be combined with nutrient composition of fish from secondary sources.
- Investigating and validating biomarkers for intake of aquatic foods in pilot studies and as an integrated part of a larger population study conducted in the AQUAFOOD project: 1) Blood fatty acids ('omega-3 index') and vitamin D profiles, both measurable in finger-prick sampled blood dry spots. 2) Exploration of using ^{13}C - ^{15}N stable isotopes in hair samples as marker for aquatic food intake. This exploration is conducted in collaboration with a research laboratory using the method for archaeological research.

The PhD study will be co-supervised by Dr Abdullah-Al Mamun and Ruhul Kabir Noakhali Science and Technology University, ([NSTU](https://www.nstu.edu.bd)), Dr. Nanna Roos, University of Copenhagen, Denmark (<https://nxs.ku.dk/english/staff/?pure=en/persons/175594>), Dr. Baukje de Roos, University of Aberdeen, UK (<https://www.abdn.ac.uk/people/b.de Roos>), Dr. David Little and Dr. Richard

Newton from the University of Stirling, UK.

The PhD will cover up to **two travels** for a total stay of **Minimum 6 months** study stay with the European (**UK and Denmark**) project partner universities for supervision and collaborative research activity.

Stipend: Monthly stipend will be given as per project rules.

Essential Qualification:

- Hold a master degree in life sciences/nutrition//public health
- Advantage to have laboratory experience, digital technology
- Interest and preferable experience in conducting field work involving humans

Please refer to the nstu (www.nstu.edu.bd) website for specific qualification, enrollment fee and process.

Desirable experiences and skills:

The candidate is expected to be flexible and collaborating with the project team and other PhD students in the AQUAFOOD project, and adapt research approaches for mutual benefits and project coherence. All PhD students (from other work packages) in the AQUAFOOD project will be involved in collaboratively designing the studies, collecting field data and in gathering and sharing the data

PhD Application Form

Applications must be received no later than **23 May 2024**

Please read the instructions carefully before completing this application form. Only complete and signed application forms will be processed. The application must be sent per email to mamun_au22@yahoo.com (Prof. Dr. Abdullah-Al Mamun, NSTU). The application email should have two pdf-format attachments; (1) the completed and signed application form in pdf-format and (2) all other supporting documents (see checklist under "Part F") compiled into one pdf-file.

Introduction

This application form is for use for applications for PhD scholarships that are part of the research project “Climate-resilient aquatic food systems for healthy lives of young women and girls in Bangladesh (AQUAFOOD)” funded by DANIDA. Each scholarship is three and half year’s full time with start around 1st July 2024. Enrolment will be at Noakhali Science and Technology University, the Department of Fisheries and Marine Science.

Who can apply?

- Only nationals of Bangladesh can apply. An MS (Masters) degree in the field of **life sciences/nutrition//public health** must have been **completed** at the time of application in Bangladesh or abroad.

This application form consists of the following nine parts

- Part A Personal Details
- Part B Doctoral Study Synopsis
- Part C Academic Qualifications & experiences
- Part D Brief Curriculum Vitae that includes the list of publications
- Part E References
- Part F Checklist
- Part G Other Information
- Part H Declaration and Signature

How to complete this application form?

- Please write in the indicated boxes. Respect all word limits
- All personal information should correspond with your certificates/passport, e.g. spelling of names
- All documents must either be originals or be certified copies
- Ensure that you complete the checklist, print out the form and sign the declaration on the last page
- All documents should be submitted in the same e-mail
- We recommend keeping photocopies of your application
- Do not include this front page when you submit your application
- Read the “Guidelines to completing the application form”
- Applications can only be submitted electronically

Please return this form and enclosures to this email address:

mamun_au22@yahoo.com (Prof. Dr. Abdullah-Al Mamun, NSTU).



NOAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY, Noakhali-3814

PhD APPLICATION FORM

Passport size
photos (two
copies)

Part A Personal Details

Note – according to passport/official documents. Always supply two email addresses that you use.

First name(s)	
Family name	
Date of birth	
NID/Passport number	
Father's Name/Husband	
Mother's name	
Gurdian Name (if any)	
Nationality	
Religion	
Sex	
Residence address	
E-mail address	
Alternative E-mail address	
Contact Number	

Part B Doctoral Study Synopsis (Max 1500 words excl. references, see Guidelines)

The working title must correspond to those found in the call for applications. Attach the doctoral study synopsis as a separate document.

Related to the announced research topic (number and title):

Part C Academic Qualifications & Experience

i. Academic Qualifications

Name of degree	University/ Broad	Field	Class/division/ position	Year
SSC				
HSC				
B.Sc. (Honors)/B pharm				
M.S./MSc/M Pharm				

ii. Research/Job Experience:

Position	Type of activities	Name of Institute/Organization	Duration of experience

All applicants must include **certified copies of official transcripts**. Documents not in English should be accompanied by an official certified translation. You must also **enclose an official explanation of the grading system**.

Part D Study relevant employment and list all your publications

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Part E Checklist

I have included the following documents in one pdf file with my application:

<input type="checkbox"/>	Certified copy of academic degrees
<input type="checkbox"/>	Certified English translation of transcripts, if necessary
<input type="checkbox"/>	Official explanation of grading system
<input type="checkbox"/>	Doctoral study synopsis
<input type="checkbox"/>	Clear copy of passport/NID
<input type="checkbox"/>	NOC from the employer

Please explain if you did not provide the required information with this application.

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Part F Other information

Equal opportunities

The project applies a policy of equal opportunities for people with special needs. Do you have any physical disability?

Yes	
No	

Criminal record

Are you currently under any criminal charge?

Yes	
No	

Part G: Name of the affiliated hall (please tick mark) : Residential/ Non-residential

Part H: Supervisor list

Name of the supervisor (s)

(a) Supervisor:

(b) Co-Supervisor:

(c) Co-supervisor:

Part I Declaration & Signature

I declare that the information provided by me is correct and complete. I understand that incomplete information will delay the application process and I accept that incorrect information will render the application invalid.

I declare that I have not previously received a PhD fellowship for doctoral education.

Date (dd/mm/yy)	
City, Country	
Name of applicant	
Signature	

Part I: Sub-Committee

Recommendation of PhD sub-committee, meeting held on

Head, PhD sub-committee

Part J: Recommendation of Faculty committee meeting held on

.....
Dean, Faculty of Science

[Please refer to the nstu (www.nstu.edu.bd) website for specific qualification, enrollment fee and process.]

Annex-1 Guidelines to complete the PhD Application Form for AQUAFOOD

These guidelines provide directions on how to complete the PhD Application Form. They do not provide detailed comments on each part of the application form; these are seen as self-explanatory. Instead the guidelines explain how applications are assessed and thus what you should pay particular attention to when completing your application.

How are applications assessed?

First, applications are screened for eligibility. You should make sure that your application is complete – pay particular attention to the items mentioned in Part F (Checklist) of the application form.

Eligible applications are then evaluated by the Assessment Committee consisting of a number of senior scholars. The evaluation categories are:

- Academic performance as indicated by (i) Honors and Masters degree with good CGPA; and (ii) documented research achievements, e.g. publications in journals with peer review or other indicators of intellectual potential (Scopus indexed), e.g. relevant working experience in (international) organizations with very competitive selection processes (iii) Laboratory/field research experience (40%).
- Research synopsis that closely relates to one of the research topics announced by the “Climate-resilient aquatic food systems for healthy lives of young women and girls in Bangladesh (AQUAFOOD)” project and demonstrates insight and interest in the subject (40%).
- Recommendations from the two academic references (20%).

Each of the three categories is given a score from 1 (poor) to 5 (excellent); eligible applicants must not score 3 or lower in any category. All short-listed applicants must score at least 4 (very good) for their submitted research synopsis. The three categories are weighted 40%, 40% and 20%. Overall average score is used to rank all applicants.

Full applications are due on **23 May 2024**. The best applicants will be short-listed around **30 May 2024**. The short-listed applicants with full research proposal will be invited for presentation on 14-15 June **2024**. We expect to offer contracts to around one-third of the short-listed applicants. The scholarships will commence on **1st July 2024** or soon after.

What should I pay particular attention to when preparing my application?

The evaluation criteria focus on your academic potential. Here is what we are looking for:

□ *Convincing research synopsis*

Your doctoral study synopsis should be closely aligned with one of the announced research topics, is mandatory. Even though you have limited space, only 1500 words (excluding references), your synopsis should (i) be complete, i.e. include sufficient information to allow an evaluation, (ii) show that you have a good overview and understanding of the relevant literature and the key issues in the research topic field, (iii) contain research questions that you plan to answer, (iv) convince the Assessors that your choice of methods is sound, and (v) that you will be able to undertake the study, i.e. that you have the competences and a realistic work plan. End the synopsis by providing the word count (excl. references).

Convincing written work

Make sure that any published work is clearly presented in your CV, in particular any peer-reviewed international journal article (Scopus indexed). Also make sure that you list any theses, book chapters, etc.

Two strong recommendation letters

Letters of recommendation are assessed for additional evidence of your academic achievements, interests, and personal motivation. The Assessment Committee will take into account the academic experience of the referee, as a scholar and as a supervisor of successful doctoral candidates. You should therefore strive to get letters of recommendations from strong academics.

Brief Curriculum Vitae

This should show your high level of academic achievement and/or relevant non-academic experiences. Include a complete list of your publications.

Feed-back

Make your peers and, if at all possible, other experienced people read and comment on your research synopsis before you submit it. Use feed-back to revise and improve the synopsis.

Consult research proposal writing guidelines

There are many good guides to how to write a convincing research proposal. Read some of these to get additional tips and inspiration on how to improve your proposal.

Format requirements

Remember that you are only allowed to submit your application as one email with two attached PhD-documents; (1) the completed and signed application form in pdf-format and (2) all other supporting documents (see checklist under 'Part F' in the "PhD Application Form") compiled into one pdf-file.

Guidelines for short-listed candidates

Short-listed applicants must develop a full research project description. This note describes how this should be done and when. There are some steps that may overlap in time: (i) development of the full research project description, (ii) submission of the final full project description, and (iii) discussion of the submitted description at personal interview.

Step 1: Development of the full research project description

You are responsible for the development of a draft project description, i.e. the next version of the research synopsis you submitted with your original application. The draft project description must contain information on:

1. Working title
2. Project background and justification
3. Objectives
4. Research questions
5. Methods
6. Risks and ethics of proposed research
7. Expected outcomes and time schedule (use Gantt chart)
8. List of references

You may find it useful to re-read the “Guidelines for completing the application form”. Note that the final project description must contain no more than 3,000 words (exclusive of item 8). Specify the number of words used at the end of the project description. Do not exceed the word limit.

The applicant is responsible for submitting the full project description via email attachments to mamun_au22@yahoo.com (Prof. Dr. Abdullah-Al Mamun, NSTU). must not be larger than 12MB in total.

Step 2: Discussion of draft research project description at personal interview

All short-listed applicants, whose full applications are submitted by the deadline, will present their full research project proposal before an assessment committee, consisting of senior university faculty both from the Noakhali Science and Technology University and University of Copenhagen. Each applicant must prepare an oral project presentation lasting no more than 15 minutes. It should start by giving a brief introduction to the interviewee.

Interviews will take place in person or virtually, exact time and place will be announced in due time before the interview.



30 April 2024

(Muhammad Jashim Uddin)

Registrar

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