

Replaced on the same memorandum and date

Government of the People's Republic of Bangladesh
Office of the Project Director, PIU
Agro-Meteorological Information Systems Development Project
Component-C of BWCSR
Department of Agricultural Extension
Khamarbari, Farmgate, Dhaka-1215

Revised Request for Expressions of Interest (REOI)
for

National Agrometeorologist Consultant (Intermittent) for BSMRAU on "Agro-Meteorological Information Systems Development Project" (Component C of Bangladesh Weather and Climate Services Regional Project)
(Contract Package No.: UNI-SD-04)

Memo: 12.01.0000.018.01.001.21. 6362

Date: 19.12.2021

The People's Republic of Bangladesh has received a credit in the amount of USD 113million as from the International Development Association (IDA) towards the cost of Agro-Meteorological Information Systems Development Project [Component –C of Bangladesh Weather and Climate Services Regional Project (BWCSR)] to be implemented by Department of Agricultural Extension (DAE) and it intends to apply part of the proceeds to payments for the provision of consultancy services for the project by hiring of an International Agro-Meteorological Services Consultant.

2. Scope of Task /Service:

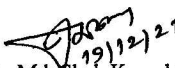
The consultant will work closely with the Chairman as well as other teachers, Department of Agrometeorology, BSMRAU, Gazipur. The scope of work includes but is not limited to:

- i. Reviewing project documents and other related information to develop a needs assessment for Agrometeorology department.
- ii. Teach the students how to make an agrometeorological forecasting and advisory service for grass-root level farmers regarding pest management, irrigation management, crop disease etc. with support from BMD, DAE and different agriculture research organisation of Bangladesh.
- iii. Developing and implementing a training plan on the use of BAMIS and of agromet information for students, and providing technical support for the procurement of data and software resources (e.g. software, database etc).
- iv. Organizing training programs and workshops on sustainable utilization of the agrometeorological information system for students.
- v. Support coordination with BMD for the installation of agromet equipment and distribution of agromet/ICT equipment under DAE, coordination with research agencies and BMD on product development.
- vi. Teach the students on satellite image collection and how to interpret it for using agriculture.
- vii. Study crop weather relationships in all important crops and forecast crop yields based on agro climatic information.
- viii. Study the relationships between weather factors and incidence of pests and diseases of various crops.
- ix. Assist Research Organizations to develop crop simulation models for different agroclimatic zones.
- x. Teach the students how to monitor agricultural droughts and salinity for effective drought and salinity management of different crops.
- xi. Learn to students how to develop weather based agro advisories to sustain crop production utilizing various types of weather forecasts and seasonal climate forecasts.
- xii. Study the influence of weather on the environment of soils on which the crops are grown.
- xiii. Help the students to do research on agrometeorology and trained up on agrometeorology equipment's and data collection.
- xiv. Teach the students how to develop of farmer's advisories during and after a natural disaster.
- xv. Support the students to operate Agrometeorological instruments.

3. Qualification and Experience:

- i. The Consultant should have a Bachelor of Science as well as Master of Science in Meteorology/Agricultural Meteorology/Physics/applied Mathematics or Ph.D. in Agricultural science

- from a reputed Public University of Bangladesh with 05 years of professional experience in agrometeorology.
- ii. The Consultant should have familiarity with state-of-the-art agrometeorological information systems in different parts of the world.
 - iii. The Consultant should have experience in handling and analysis of large meteorological databases to produce timely agrometeorological forecasts and advisories for the intended audiences.
4. Department of Agricultural Extension (DAE) now invites eligible applicants to indicate their interest in providing the services. Applicants are invited to provide information indicating that they are qualified to perform the services (**Application Submission Form, Complete CV and supporting documents**).
 5. Detailed Terms of Reference (ToR) will be available upon request from the address provided below either through email or in person. ToR will also be available in the website of DAE (www.dae.gov.bd/site/view/tenders/tender-EOI-job-circular and <https://www.bamis.gov.bd/en/page/tender/>).
 6. The consultant shall be selected following Individual Consultant (IC) based selection method set forth in Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, January 2011 (Revised July 2014) on the basis of consultant's qualification, experiences and capability to carry out the assignment.
 7. Expressions of Interest shall be submitted by **16 .00 hours (BD local time) on 23 January, 2022** to the address below (in person, or by hard copy, or by e-mail).


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Designation: Project Director
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**Terms of Reference (TOR) for the
National Agrometeorologist Consultant (Intermittent) to be engaged Bangabandhu Sheikh Mujibur
Rahman Agricultural University (BSMRAU), Package No: UNI-SD-04 Under 'Agro-Meteorological
Information Systems Development Project (AMISDP)' Component –C of "Bangladesh Weather and
Climate Services Regional Project" Department of Agricultural Extension (DAE)**

A. Background

Department of Agricultural Extension (DAE), Ministry of Agriculture, GOB, is providing weather based agrometeorological advisories at national and regional level under the World Bank project. It is envisaged under AMISDP that Bangladesh Meteorological Department (BMD), DAE, and Agricultural universities/Research Institutes will work together to produce and disseminate agrometeorological advisories to farmers to enhance climate resiliency and food security in the country. This calls for a close collaboration between the different agencies and Agro-Meteorological educational programme to strengthen functions like data collection and analysis, agricultural research and extension. Hence a Joint initiative by DAE & Agricultural Universities is being set up to strengthen the Agrometeorological Advisory Services in Bangladesh.

Agro-Meteorological educational programme aims to impart education on scientific aspects related to effects and impacts of weather and climate on crops, rangeland management, livestock, and various agricultural operations. Weather information and forecasts are the two important aspects of meteorology and they are of vital importance to agriculture, fisheries, water management and disaster mitigation etc. While imparting knowledge of Agricultural Meteorology, a focus on efficient management of agro-climatic resources and crop microclimate modifications for the sustainability of agricultural production system should also be kept in the sight. The Agro-meteorologist requires not only a sound knowledge of meteorology, but also of agronomy, Soil Science, Plant Physiology, Plant and Animal Pathology and related disciplines, in addition to common agricultural practices.

This branch of Meteorology is of particular relevance to Bangladesh because of the high dependence of its agriculture on weather & climate. The Government of Bangladesh, with support from World Bank financed "Bangladesh weather and climate services regional project (BWCSR)" has started developing and delivering Agrometeorological Advisory Services in the country. As of now the Department of Agriculture Extension, Ministry of Agriculture is rendering agrometeorological service at district level and there are future plans to extend it to upazila levels. This service is challenged by lack of trained manpower in Agriculture Meteorology beside local research & Development on impacts of weather & climate on crops and animals and carrying out weather wise farming. Hence, offering such Post-Graduate (PG) course is very much need of the day. Graduates would also be bringing important skills to sectors such as agribusiness and rural banking by having a better understanding of weather and climate risks to agriculture. The DAE and Agricultural Universities have an agreement to this effect as given in Annexure-I.

B. Objectives of the consultancy

The consultant will provide scientific and technical support to the Department of Agrometeorology, Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Gazipur and is expected to support;

1. Review current activities and identify weaknesses and limitations of current agrometeorological forecasting and the dissemination of information;
2. Render assistance for addressing users' demand and needs;
3. Help undertake research & development work
4. Help organizing trainings on related subjects of agrometeorology
5. Teach agrometeorology related subjects.
6. Help develop tools and products for use in agrometeorological service

C. Scope of Services and Tasks:

The consultant will work closely with the Chairman as well as other teachers, Department of Agrometeorology, BSMRAU, Gazipur. The scope of work includes but is not limited to:

1. Reviewing project documents and other related information to develop a needs assessment for Agrometeorology department.
2. Teach the students how to make an agrometeorological forecasting and advisory service for grass-root level farmers regarding pest management, irrigation management, crop disease etc. with support from BMD, DAE and different agriculture research organisation of Bangladesh.
3. Developing and implementing a training plan on the use of BAMIS and of agromet information for students, and providing technical support for the procurement of data and software resources (e.g. software, database etc).
4. Organizing training programs and workshops on sustainable utilization of the agrometeorological information system for students.
5. Support coordination with BMD for the installation of agromet equipment and distribution of agromet/ICT equipment under DAE, coordination with research agencies and BMD on product development.
6. Teach the students on satellite image collection and how to interpret it for using agriculture.
7. Study crop weather relationships in all important crops and forecast crop yields based on agro climatic information.
8. Study the relationships between weather factors and incidence of pests and diseases of various crops.
9. Assist Research Organizations to develop crop simulation models for different agroclimatic zones.
10. Teach the students how to monitor agricultural droughts and salinity for effective drought and salinity management of different crops.
11. Learn to students how to develop weather based agro advisories to sustain crop production utilizing various types of weather forecasts and seasonal climate forecasts.
12. Study the influence of weather on the environment of soils on which the crops are grown.
13. Help the students to do research on agrometeorology and trained up on agrometeorology equipment's and data collection.
14. Teach the students how to develop of farmer's advisories during and after a natural disaster.
15. Support the students to operate Agrometeorological instruments.

D. Qualification Requirement and Eligibility criteria of the Consultant

Essential:

1. The Consultant should have a Bachelor of Science as well as Master of Science in Meteorology/Agricultural Meteorology/Physics/applied Mathematics or Ph.D. in Agricultural science from a reputed Public University of Bangladesh with 05 years of professional experience in agrometeorology.
2. The Consultant should have familiarity with state-of-the-art agrometeorological information systems in different parts of the world.
3. The Consultant should have experience in handling and analysis of large meteorological databases to produce timely agrometeorological forecasts and advisories for the intended audiences.

Desirable:

1. Proven experience in the field of remote sensing and GIS.
2. International training on agrometeorology/meteorology/climatology offered by any reputed organization.
3. Experience in development of early warning systems for agriculture will be an advantage.
4. Experience in developing a platform for the exchange of agro-meteorological information
5. Experience in developing monitoring and evaluation plan
6. Knowledge of climate change impacts on agriculture will be an advantage.
7. Should be energetic and must be willing to travel frequently to any place in the country.

The consultant needs to:

- i. have the legal status to enter into the contract;
- ii. not be under a declaration of ineligibility for corrupt, fraudulent, coercive practices in completing for, or in executing a contract under public fund;
- iii. not insolvent, in receivership, bankrupt or being wound up their business activities have not been suspended and it is not the subject of legal proceedings for any of the foregoing activities; and
- iv. fulfill its obligations to pay taxes and social security contributions under the relevant national laws and regulations.

E. Duration of Assignment

The duration of the assignment is 16 months. After completion of one years the project may be extended of the contract for next 04 months.

G. Deliverables

The consultant will be responsible for the following deliverables:

Sl. No	Outputs	Time frame for the Report to be provided by the Consultant
1	Inception Report	After joining within two weeks
2	Monthly Report	1 st week of the next month.
3	Quarterly Report	10 th day of the next quarter.
4	Annual Report	Within 30 days in the next fiscal year.
5	Final Report	At the time of assignment closing
6	Any other Report as per requirement of the project activities	As and when necessary and required by the authorities.

H. Reporting:

The Consultant shall report all ToR activities to the Project Director, PIU, AMISDP, DAE through chairman, Department of Agrometeorology, BSMRAU, Gazipur. This position will be based at BSMRAU, Gazipur. The Consultant will be a work under the guidance of the Project Director, work in close Coordination with other members of the PIU and will provide constant feedback, if necessary.

I. Selection Criteria:

The consultant shall be selected following Individual Consultant (IC) based selection method set forth in Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, January 2011 (Revised July 2014) on the basis of consultant's qualification, experiences and capability to carry out the assignment.

J. Tentative Payment Arrangement:

The contract will be based on monthly payment. The National Agromet Technical Consultant will be paid a negotiable consolidated remuneration inclusive of all applicable Tax & VAT as per Government Rule of Bangladesh as amended time to time (<http://nbr.gov.bd/>). The Consultant shall be responsible to settle all taxes and duties including the applicable VAT and AIT as per the laws of the GoB. However, the Project office will deduct the VAT & AIT as per prevailing rules and regulations.

K. Competencies

- Excellent team player with good interpersonal skills
- Ability to manage workload with minimum supervision
- Ability to work under pressure and tight deadlines
- Ability to accommodate additional demands at short notice
- Ability to work in a multi-cultural environment
- Ability to communicate effectively orally and in writing in English in order to communicate complex, technical information to technical and general audiences
- Strong strategic planning, results-based management and reporting capabilities
- Displays cultural, gender, religion, nationality and age sensitivity and adaptability

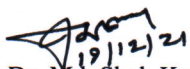
M. Terms and Conditions

The Consultant shall be paid remuneration monthly at the rate agreed and included in the contract which includes all his/her overheads, social charges and other associated costs including local transportation and insurance premium costs. The Consultant shall be responsible for all taxes and duties including income tax applicable as per GoB rules and regulations.

The consultant will not be entitled for Health facility, LTC, House Rent etc.

Chairman, Department of Agrometeorology, BSMRAU, Gazipur, shall provide following facilities to consultant during his tenure of services:

- a) Office space with furniture & computer
- b) Internet access
- c) Office stationeries
- d) Photocopying facilities
- e) Any other facility required to execute the assigned tasks


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