Government of the people’s Republic Bangladesh
Agro-Meteorological Information Systems Development Project (AMISDP)
Component –C of Bangladesh Weather and Climate Services Regional Project (BWCSRP)
Department of Agricultural Extension (DAE)
Khambari, Farmgate, Dhaka-1215.

Request for Expressions of Interest (REOI)
For
Technical Consultancy on Agro-Meteorological Training Needs Assessment
(Package No: DAE/SD-01)

Memo: 12.01.0000.018.03.001.17.489 Date: 16/09/2018

The People’s Republic of Bangladesh has received a credit in the amount of USD 113 million 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 (BWCSRP)] 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 a Consulting Firm for “Technical Consultancy on Agro-Meteorological Training Needs Assessment”.

1. Objectives:

The main objectives of agrometeorological training needs assessments are given below:

- To determine the gap in capacities of DAE officials at different levels as well as farmers to improve their knowledge on weather and climate as well as agrometeorological services.
- To assess the gap between what is required of an official to perform competently and what he actual knows.
- To determine if a training need exists and if it does, what training is required to fill the gap.
- To determine the different levels of training which is required for various target groups.

2. Scope of the work:

The proposed consultancy will be accomplished through several tasks, but it is not limited. Those tasks will be furnished through set of activities, which are given below:

- To identify agrometeorological training needs assessment for officials of DAE as well as farmers on weather and climate and agrometeorological services.
- To determine agrometeorological training needs assessment organizational context.
- To perform agrometeorological training needs assessment gap analysis for officials as well as farmers.
- To identify agrometeorological training needs assessment of farmers as the end users for on agrometeorological services.
- To determine design of agrometeorological training needs assessment analysis for officials of DAE as well as farmers.
- To establish the method of selection criteria.
- To assess the advantages and disadvantages of different methods.
- To collect data from DAE officials as well as farmers for agrometeorological training needs assessment.
- To conduct interviews by questionnaires and surveys.
- To conduct qualitative and quantitative analysis for agrometeorological training needs assessment.
- To collect feedback on agrometeorological training needs assessment from officials of DAE as well as farmers.
3. Qualification of the consulting firm:

The Consulting firm must be legally registered/recognized/competent institution in Bangladesh. It must have timely cleared the governmental taxes and must be working according to the governmental rules, regulations and boundaries. The team should consist of Sr. Agro-meteorologist/Environmentalist Experts and Agriculture Experts having relevant knowledge and experience in the similar fields and tasks. The detailed CVs of the personnel to be involved should be submitted along with the original signature and the written commitment on the assigned work.

The consulting firm will be selected based on the adequacy of the relevant professionals and length of experience. Therefore, the expected firm should have at least five years experiences in the field of agricultural research including market research. The firm must have similar experiences at least five similar projects.

Other criteria that must be fulfilled by firm are:

The firm/company must be capable of providing enough manpower, financial resources and equipment to perform the entire scope of work mentioned herein.

In case of a Joint Venture, the role and responsibility of each partner should be clearly furnished.

The prospective bidder must submit the audited turnover at least BDT. 10 Lac at the time of bidding.

4. Consulting firm Selection Method:

The consulting firm shall be selected for assessing the "Technical Consultancy on Agrometeorological training needs assessment" on the basis of consultant qualification selection (CQS) methods set forth in guidelines: selection and employment of consulting firm under IBRD Loans & IDA credits & Grants by World Bank Borrowers, January 2011 & on the basis of Consulting firms’ qualification, experiences and capability to carry out the assignment.

5. 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 (Complete Technical, Financial proposals 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.daegov.bd/site/view/tenders/Tender-EOI-Job-Circular).

7. Expressions of Interest shall be submitted by 16.00 hours (BD local time) on 07 October 2018 to the address below (in person, or by mail, or by e-mail).

Name: Dr. Mazharul Aziz
Designation: Project Director
Address: Room # 726, 6th Floor, Middle Building, Khamarbari, Farmgate, Dhaka-1215
Email: azizdae@gmail.com
Phone: +880255028422
Government of the people's Republic Bangladesh
Agro-Meteorological Information Systems Development Project (AMISDP)
Component –C of Bangladesh Weather and Climate Services Regional Project (BWCSRP)
Department of Agricultural Extension (DAE)
Khamarbari, Farmgate, Dhaka-1215

Terms of Reference (ToR)
for
Technical Consultancy on Agrometeorological training needs assessment

Package No: DAE/SD-01
Package Name: Technical Consultancy on Agro-meteorological Training Need Assessment

1. Background

Increased frequency of climate extremes is another face of climate change confronted by humans, resulting in catastrophic losses in agriculture. While climate extremes take place on many scales, impacts are experienced locally and mitigation tools are a function of local conditions. To address this, agrometeorological advisories along with early warning systems must be place and location based, incorporating the climate, crop and land attributes at the appropriate scale.

The agrometeorological weather forecast is one of the most important items focused in the form of an agrometeorological bulletin. In this context, short- and long-term forecasts bear particular importance in bulletin, and users use these forecasts in their operational applications. All the countries in the region have agrometeorological databanks, including long term daily climatic data, phenological observations for different cultivated plants, and soils data. Climate data quality controls based on standards are regularly accomplished. In most countries of the region, news and information are broadcasted through the mass media in critical situations, particularly to farmers.

Agrometeorological technical training will be provided to DAE officials at different level as well as to farmers to utilize weather forecasts in their on-farm applications. This includes, i) organization of workshops/seminars on the BAMIS portal at the DAE headquarters in agrometeorological data analysis and development of products and ii) organization of short term training and exposure visits to appropriate institutes and organizations abroad to promote a better understanding of the current methods and approaches in the development of agrometeorological advisories and products. Given the diversity of weather and climate in different agroecological regions in the country and the range of crops and cropping systems which farmers cultivate, there are a number of critical weathers, climate and agriculture issues on which advanced information will be needed to develop effective strategies to maintain agricultural productivity. As DAE has a good network of offices in the 64 districts providing information to farmers, this network will
be used for the organization of workshops for the regional, district and upazila levels officials in the use of BAMIS portal. This project will provide training for 74 batches of officers, 367 batches of Sub Assistant Agriculture officer (SAAO) and 1000 batches of farmers and each batch consist by 30 persons. About five National and 70 regional workshops will also be arranged by the project.

In this context, training plays an important role in the advancement of human performance in a given situation. Training is a process of acquisition of new skills, attitude and knowledge in the context of preparing for entry into a vocation or improving one’s productivity in an organization or enterprise. Effective training requires a clear picture of how the trainees will need to use the information received during the training to replace the local practices which they have adopted before in their situation. Officials and farmers training workshops are directed towards improving their job efficiency at the farming level. Training needs assessment process helps determine the priority of changes in knowledge, skill, attitude and behavior that will provide the greatest impact on achieving organizational or individual goals. The possible methods or techniques for individual analysis include performance appraisal, interviews, questionnaires, tests, analysis of behavior, informal talks, checklist, counseling, critical incidents, recording, surveys, and observations. Training is a circular process that begins with needs identification and after a number of steps ends with evaluation of the training activity. Thus, there is a need for agrometeorological training assessment for DAE officials at different levels as well as farmers in Bangladesh.

2. Objectives:
The main objectives of agrometeorological training needs assessments are given below:

- To determine the gap in capacities of DAE officials at different levels as well as farmers to improve their knowledge on weather and climate as well as agrometeorological services.
- To assess the gap between what is required of an official to perform competently and what he actual knows.
- To determine if a training need exists and if it does, what training is required to fill the gap.
- To determine the different levels of training which is required for various target groups.

3. Scope of the work

The proposed consultancy will be accomplished through several tasks, but it is not limited. Those tasks will be furnished through set of activities, which are given below:

- To identify agrometeorological training needs assessment for officials of DAE as well as farmers on weather and climate and agrometeorological services.
- To determine agrometeorological training needs assessment organizational context.
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• To identify agrometeorological training needs assessment of farmers as the end users for agrometeorological services.
• To determine design of agrometeorological training needs assessment analysis for officials of DAE as well as farmers.
• To establish the method of selection criteria.
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• To conduct interviews by questionnaires and surveys.
• To conduct qualitative and quantitative analysis for agrometeorological training needs assessment.
• To collect feedback on agrometeorological training needs assessment from officials of DAE as well as farmers.

4. Brief Method

Proper tools and methods are very essential for assessing agrometeorological training needs assessment on weather and climate information as well as agrometeorological services. However, both qualitative and quantitative methods will be used to collect data for this study.

Under qualitative method, consulting firm will conduct focus groups discussion (FGD), Key Informant Information (KII), Large gathering (LG), Validation Workshop (VW) or any other methods and individual interviews on agrometeorological services and training of DAE officials at different levels as well as farmers in 28 upazilas of 14 regional offices (list of upazilas name enclosed below). Training needs assessment will be carried out on how they receive and use agrometeorological advisories, the perceived gaps, and suggestions for improvement. The assessment will uncovered the key role of diverse communications approaches. In villages where many disseminations channels will be used to disseminate agrometeorological services, such as SMS and voice messaging, meetings and trainings by agricultural extension officers, farmers clubs, and roving seminar in villages, awareness and use of agrometeorological advisories and training on it.

Under quantitative method, the consulting firm will collect data from randomly selected at large, medium, small and landless farmers on their needs for different agrometeorological services and how they can receive and use agrometeorological services and benefit from the program. The consulting firm also will find out the training need assessment on Kiosk, Analog Display Board, Handheld Automatic Rain Gauge (ARG), Tablet, Web base portal software, Apps etc for DAE officials as well as farmers from different upazilas.

5. Project Outcome:

The outcome of the project will be enhanced ability on how to use weather and climate information as well as agrometeorological advisories for strategic use of climate information and for coping with climate variability and extreme weather and climate events for sustainable agricultural development.
6. **Output and Deliverable:**

The output of agrometeorological training needs assessment will be to help the farmers to alleviate the adverse impacts of extreme weather events and maximize benefits of benevolent weather conditions. Following are the expected deliverables from the proposed study:

i. Inception report on Agrometeorological Training Needs Assessment.


7. **Duration of services and reporting:**

Total study period will be about three months. The tentative reporting schedule for the consultant’s assignment is given below:

<table>
<thead>
<tr>
<th>Reports</th>
<th>Planned Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception Report: 05 copies</td>
<td>At the end of 1st month of contract signing</td>
</tr>
<tr>
<td>Draft Final Report (with workshop): 05 copies</td>
<td>At the end of the 3rd month of contract signing</td>
</tr>
<tr>
<td>Final Report: 10 copies</td>
<td>At the end of the project duration.</td>
</tr>
</tbody>
</table>

8. **Qualification of the consulting firm**

The consulting firm will be selected based on the adequacy of the relevant professionals and length of experience. Therefore, the expected firm should have at least five years experience in the field of agricultural research including market research. The firm must have similar experiences at least five similar projects.

Other criteria that must be fulfilled by firm are:

The firm/company must be capable of providing enough manpower, financial resources and equipment to perform the entire scope of work mentioned herein.

In case of a Joint Venture, the role and responsibility of each partner should be clearly furnished.

The prospective bidder must submit the audited turnover at least 10 Lac taka at the time of bidding.

9. **Key personnel and Qualifications**

It is expected that three man-months of key professional staff may be required for the study as shown in the Table 1 below. The qualifications and responsibilities are shown in Table 2.

Table 1: Key personnel and estimated duration
Table 2: Composition of the proposed study team and qualification

<table>
<thead>
<tr>
<th>SL No.</th>
<th>Position</th>
<th>Educational Qualification</th>
<th>Area of Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Team Leader/Sr. Agro-meteorologist/Environmentalist</td>
<td>Master's degree in agricultural meteorology/agronomy or engineering discipline, such as irrigation water management, or water resources and Bachelor degree in agriculture/agricultural engineering or related subject or Environmental Science.</td>
<td>Total years of experience required will be 10 with at least 7 years experiences in conducting and preparing climate related agricultural assessment study. Working experience with BADC, BARC, BRRI or DAE will be given preference. He/she should have the capability to analyze the existing agricultural practices including cropping pattern, agricultural input use and crop production, agro-met services and early warning.</td>
</tr>
<tr>
<td>2.</td>
<td>Agriculture Expert</td>
<td>B.Sc in Agriculture and M.Sc in any Agriculture discipline.</td>
<td>Minimum five years of experience in conducting and preparing climate related agricultural assessment study. Working experience with BADC, BARC, BRRI or DAE will be preferred. Experience in agricultural related baseline survey.</td>
</tr>
</tbody>
</table>
3. Agro-economist
B.Sc in Agriculture Economics and M.Sc in any discipline.
Minimum five years of experience in conducting and preparing baseline survey and report writing.

4. Data Analyst/Jr. Programmer
B.Sc. in Computer Science or Statistics
Minimum 2 years of experience in data processing, analyzing and automated report generation

5. Field Coordinator
B.Sc. in any discipline.
Minimum five years of experience in conducting and coordinating the agricultural related field survey.

6. Data Collector
Diploma in Agriculture or Diploma in any discipline.
Minimum 2-3 years of experience in conducting and preparing climate change and agricultural assessment study.

10. Consulting firm Selection Method:

The consulting firm shall be selected for assessing the “Technical Consultancy on Agrometeorological training needs assessment” on the basis of consultant qualification selection (CQS) methods set forth in guidelines: selection and employment of consulting firm under IBRD Loans & IDA credits & Grants by World Bank Borrowers, January 2011 & on the basis of Consulting firms’ qualification, experiences and capability to carry out the assignment.

11. Technical Evaluation Criteria

The consulting firm shall be selected for assessing the “Technical Consultancy on Agrometeorological training needs assessment” on the basis of consultant qualification selection under IBRD Loans & IDA credits & Grants by World Bank Borrowers, January 2011 & on the basis of Consulting firms’ qualification, experiences and capability to carry out the assignment.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Evaluation Criteria</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Establishment of the firm</td>
<td>5</td>
</tr>
<tr>
<td>1.1</td>
<td>Years of Establishment (at least 5 years)</td>
<td>2</td>
</tr>
<tr>
<td>1.2</td>
<td>Audited turnover at least 10 Lac Taka up to bidding time.</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>General Experience of the Firm</td>
<td>10</td>
</tr>
<tr>
<td>2.1</td>
<td>General Experience of Firm</td>
<td>4</td>
</tr>
<tr>
<td>2.2</td>
<td>Specific Experience of the Firm</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Description of Approach, Methodology and Work Plan for Performing the Assignment.</td>
<td>40</td>
</tr>
<tr>
<td>3.1</td>
<td>Work Plan</td>
<td>11</td>
</tr>
</tbody>
</table>
3.1.1 The main activities of the assignment, their content and duration, phasing and interrelations.

3.1.2 Clarity of progress reporting plan and delivery dates of the reports.

3.2 Technical Approach and Methodology

3.2.1 Understanding of the objectives of the assignment and approach to the services.

3.3 Organization and staffing.

3.3.1 Structure and composition of project team.

3.3.2 Description of individual roles.

4. Qualifications and competence of the Consulting firm’s personnel proposed to the assignment

4.1 Team Leader

4.1.1 Education

4.1.2 Specific Experience

4.1.4 Experience as Project Team Leader

4.2 Agriculture Expert

4.2.1 Education

4.2.2 Specific Experience

4.5 Agro-economist

4.5.1 Education

4.5.2 Specific Experience

4.6 Data Analyst/Jr. Programmer

4.6.1 Education

4.6.2 Specific Experience

12. Payment Schedule

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Timing (from Contract signing)</th>
<th>Payment %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception Report</td>
<td>After acceptance of Inception Report i.e. 1st month of contract signing</td>
<td>20 %</td>
</tr>
<tr>
<td>Draft Final Report</td>
<td>After acceptance of draft final report</td>
<td>60%</td>
</tr>
<tr>
<td>Final Report</td>
<td>After acceptance of final report</td>
<td>20%</td>
</tr>
</tbody>
</table>

Note:

1. The Consulting Firm will be responsible for all taxes and duties including income tax applicable as per GoB rules and regulations

(Dr. Mazharul Aziz)  
Project Director

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## Table: Names of 28 upazilas in 14 Regions

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Region</th>
<th>District</th>
<th>Upazila</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dhaka</td>
<td>Kishoregonj</td>
<td>Mithamoin</td>
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<tr>
<td>2.</td>
<td>Tangail</td>
<td></td>
<td>Dhanbari</td>
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<tr>
<td>3.</td>
<td>Comilla</td>
<td>Comilla</td>
<td>Muradnagar</td>
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<td>4.</td>
<td>Brahmanbaria</td>
<td></td>
<td>Bijoynagar</td>
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<tr>
<td>5.</td>
<td>Sylhet</td>
<td>Sunamgarj</td>
<td>Tahirpur</td>
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<tr>
<td>6.</td>
<td>Sylhet</td>
<td></td>
<td>Jointapur</td>
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<tr>
<td>7.</td>
<td>Mymensingh</td>
<td>Sherpur</td>
<td>Nokhla</td>
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<tr>
<td>8.</td>
<td>Mymensingh</td>
<td>Mymensingh</td>
<td>Fulpur</td>
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<td>9.</td>
<td>Jessore</td>
<td>Jessore</td>
<td>Ovoinagar</td>
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<td>10.</td>
<td>Magura</td>
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<td>salika</td>
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<td>11.</td>
<td>Bagura</td>
<td>Bagura</td>
<td>Dhunot</td>
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<td>12.</td>
<td>Joypurhat</td>
<td>Joypurhat</td>
<td>Akkelpur</td>
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<td>13.</td>
<td>Rajshahi</td>
<td>Rajshahi</td>
<td>Durgapur</td>
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<td>14.</td>
<td>Naogaon</td>
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<td>Nojipur</td>
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<td>15.</td>
<td>Khulna</td>
<td>Satkhira</td>
<td>Shemnagr</td>
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<td>16.</td>
<td>Bagerhat</td>
<td>Bagerhat</td>
<td>Mongla</td>
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<td></td>
<td>Borishal</td>
<td>Borguna</td>
<td>Bamna</td>
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<td>17.</td>
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<td>18.</td>
<td>Potuakhali</td>
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<td>Golachipa,</td>
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<td>19.</td>
<td>Rangpur</td>
<td>Rangpur</td>
<td>Mithpukur</td>
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<td>20.</td>
<td>Kurigram</td>
<td></td>
<td>Bhurungamari</td>
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<td>21.</td>
<td>Faridpur</td>
<td>Shariatpur</td>
<td>Naria</td>
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<td>Charbhadrasan</td>
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<td>23.</td>
<td>Chittogram</td>
<td>Coxbazar</td>
<td>Kutubdia</td>
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<td>24.</td>
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<td>Noakhali</td>
<td>Kabirhat</td>
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<td>25.</td>
<td>Rangamati</td>
<td>Bandarban</td>
<td>Lama</td>
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<td></td>
<td>Rangamati</td>
<td>Kaptai</td>
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<td>27.</td>
<td>Dinajpur</td>
<td>Dinajpur</td>
<td>Birol</td>
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<tr>
<td>28.</td>
<td></td>
<td>Thakurgaon</td>
<td>Baliadangi</td>
</tr>
</tbody>
</table>

(Cdr. Muzharul Aziz)  
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Ayr-Intensrhisration System Development Project  
Department of Agricultural Extension  
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