TERMS OF REFERENCE (TOR)

for

Selection of Web Firm for Web Site Designing Development & Hosting

Under

"চট্টগ্রাম জেলার মীরসরাই উপজেলার উন্নয়ন পরিকল্পনা প্রণয়ন ঃ সার্বিক দুর্যোগ ব্যবস্থাপনাকে ভূমি ব্যবহারের মাধ্যমে সম্পৃক্তকরণ"

**(Preparation of Development Plan for Mirsharai Upazila, Chattogram   District:
Risk Sensitive Landuse Plan)**

URBAN DEVELOPMENT DIRECTORATE
Ministry of Housing and Public Works
Government of the People's Republic of Bangladesh
November, 2016

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Signature of the Bidder   Signature of the Project Director   Signature of the Director

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BCKGROUND INFORMATION OF THE PROJECT
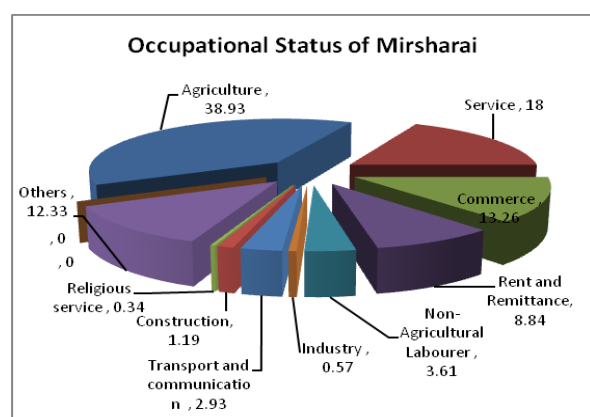### *1.1.   Project Background*

Mirsharai Upazila (CHATTOGRAM   DISTRICT) area 482.88 sqkm(BBS)/509.80sqkm(GIS Data), located in between 22°39' and 22°59' north latitudes and in between 91°27' and 91°39' east longitudes. It is bounded by TRIPURA state of India, CHHAGALNAIYA and FENI SADAR upazilas on the north, SITAKUNDA upazila and BAY OF BENGAL on the south, FATIKCHHARI upazila on the east, SONAGAZI and COMPANIGANJ (NOAKHALI) upazilas on the west. Mirsharai Thana was formed in 1901 and it was turned into an upazila in 1983. Mirsharai Upazila consists of 2 Municipality, 16 Union and 113 Mouza.

Mirsharai, the combination of lake and hilly area contains attractive scenic beauty on the southernmost part of Bangladesh. The most important attraction of the upazila is that one can travel Mohamaya Chara Lake by speed boat and explore hilly area and can enjoy Khoiyachora, Baghbiani, Napitachora, Sonaichora, Mithachora and Boyalia waterfalls. This area is located 192.2 km far from DHAKA and 4.5 hour bus journey. Anyone can travel by rail and it is 197 km of rail journey and it takes 4.5 hour from Dhaka to Mirsharai Upazila. 56 km from the CHATTOGRAM   Divisional headquarters and takes 1.5 hour travel by bus. The Bangladesh Road Transport Corporation introduced a direct bus service from Dhaka to *Mirsharai* via comilla.(Source: Banglapedia,2012)

At Mirsharai Upazila main river is Feni; Sandwip Channel is notable; canal 30, most noted of which are Feni Nadi, Isakhali, Mahamaya, Domkhali, Hinguli, Moliaish, Koila Govania and Mayani Khal. The hills range on the northern and eastern side of this upazila along the bank of the Feni River extended up to Chattogram   and the Chattogram   hill tracts

Historical Events: Sultan Fakhruddin Mobarak Shah conquered Chattogram   in 1340 AD and established the Muslim rule in this region. During the reign of Gaur Sultans Hussain Shah and Nusrat Shah, Paragal Khan and Chhuti Khan were the rulers of this area. Subsequently Nizam Shah, brother of emperor Sher Shah, was the ruler of this area. Nizampur Pargana is named after Nizam Shah and the whole area of Mirsharai came under the control of Nizampur pargana. From the beginning of the 16th century this region was very rich in Bangla literature. Most of the time between 1580 and 1666 this region was under the control of the Arakanese. The place at which (of the present Mirsharai thana) Bujurg Umed Khan, son of Subadar Sayesta Khan, landed after crossing the Feni River was named as Bujurg Umedpur. With the conquest of Chattogram   by Bujurg Umed Khan in 1666, this region came permanently under the Mughal rule. Towards the end of British rule in India, Durgapur and Karerhat areas of Mirsharai upazila were the centres of revolutionary activities of Chattogram . A fierce battle was fought between the freedom fighters (under Capt. Wali Ahmed) and the Pak army at a place adjacent to the Fenafuni Bridge on the south of Mirsharai sadar in which about 100 Pak soldiers were killed. Besides, direct encounters were held between the freedom fighters and the Pak army at many' places including Shuvapur Bridge, Hinguli Bridge, Aochi Mia Bridge and Mostan Nagar.

Main   occupations: Agriculture 38.93%, non-agricultural labourer 3.61%, industry 0.57%, commerce 13.26%, transport and communication 2.93%, service 18%, construction 1.19%, religious service 0.34%, rent and remittance 8.84% and others 12.33%. Total cultivable land 22,896.40 hectares, fallow land 147713 hectares; single crop 38.91%, double crop 42.46% and treble crop land 18.63%. At present Cultivable land under

Occupational Status of Mirsharai

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irrigation is 6,917.85 hectare. Ownership of agricultural land Landowner 51.30%, landless 48.70%; agricultural landowner: urban 38.82% and rural 52.09%.

Value of land : The market value of the first grade arable land is Tk 30000 per 0.01 hectare. Main crops Paddy, potato, aborigine, bean, tomato, pumpkin and radish. Extinct or nearly extinct crops Sugarcane, jute, arahar, mustard, sesame, linseed, ground nut. Main fruits Mango, blackberry, jackfruit, banana, papaya, litchi, pineapple, water-melon.

Communication facilities Roads: Pucca road 230 km, semi-pucca road 119 km, mud road 1435 km; railway 16 km; waterway 11 nautical miles, Rail junction 4. Extinct or nearly extinct traditional transport Palanquin, bullock cart. Noted manufactories Carpet industry, pipe mill, ice factory, rice mill, bakery, brick-field, steel furniture, fish- poultry' feed' factory, bidi factory. There are also Cottage industries, Goldsmith, blacksmith, potteries, weaving, tailoring, bamboo and wood work. Hats, bazars and fairs Hats and bazars are 52, fairs 5, most noted of which are Abu Torab Bazar, Kamar Ali Bazar, Bara Daroga Hat, Mahajan Hat, Karer Hat, Baraia Hat, Shantir Hat, Zorwarganj Baishakhi Mela, Baruni Snan Mela and Shadhinata Mela. Main exports product is Bamboo, fish, paddy, potato, banana, vegetables.

NGO Activities: Operationally important NGOs are BRAC, Proshika, ASA, Sheba, CARE, and Hunger Project. Upazila health complex 1, family planning centre 16, satellite clinic 11.

Opportunity: Bangladesh can earn money in local and also in foreign exchange by opening a tourist resort at *Mirsharai*. The spot, if properly developed will become an excellent holiday resort and tourist centre. Rowing facility can be arranged easily; fishing and hunting facilities are already there. The success of developing *Mirsharai* as a tourist centre and Special Economic Zone depends much on good communication facilities and availability of modern amenities. Moreover, the proposed *Special Economic Zone* would generate many industry related new activities including huge vehicular traffic such as air, rail, road and water. This phenomenon would have both positive and negative impact on the socio-economic condition and existing land use pattern of the region. The proposed planning package would guide such probable changes in the socio-economic condition and land use pattern of the region, and would also address the adverse impact of such changes.

The proposed project would be prepared on a regional development perspective considering the region as a part of whole of Mirsharai Upazila and its 16 unions. In this development planning package since its location is strategically important from the regional context because this upazila is situated on the way to Dhaka Chattogram highway as the highway runs through this upazila.

 Description of the Project Area: A detailed description of the Project Area is given below:

Table: Area, Population and Density of the Project Area:

Municipality	Union	Mouza	Village	Population		Density (per sq km)	Literacy Rate (%)
				Urban and Other Urban	Rural		
2	16	103	208	31206	367510	826	55.1

Source: BBS, 2011

Mirsharai sea beach, hilly area, Mohamaya Chara Lake, Khaiya Chara region has the greater potential for tourism development as there are abundant resources to attract tourists. Mirsharai is developing in an unplanned and haphazard manner very rapidly due to the ample opportunity for tourism

development, which is acting as pull factor for private sector developers. Hence, this project has been under taken to protect the region from depletion of its natural resources and character and tourism development as well.

Moreover, honorable MoHPW Minister expressed his heartiest interest to develop char of this Upazila as an exclusive economic zone; as well as to establish a tourist zone and economic zone covering Mirsharai upazila.

1.2   Objectives of the Project

The objective of the project is to optimize coastal resources and activities for sustenance of marginal people. The coastal activities and resources are very important to the economy and life of the people of Bangladesh whose living conditions are inextricably linked to the productivity and sustainability of coastal zone. There is no long term Holistic Development Plan for the coastal zone. Coastal zone needs to be integrated with the mainstream of development process of the country. So, an interdisciplinary development planning approach is urgent to optimize livelihood of coastal zone. The Physical development planning problems, needing attention, are as follows:

(i)   To integrate coastal zone with the mainstream of development process of the country.
(ii)   To frame policies for the best use of land and its control for the Mirsharai Upazila.
(iii)   To optimize coastal environment for sustenance of marginal people.
(iv)   Formulation of Policies and plans for mitigation of different types of hazards, minimizing the adverse impacts of climate change and recommend possible adaptation strategies for the region.
(v)   Formulation of Policies and plans for gradual nucleation of settlements with policies and plans for development of growth centers of the area.
(vi)   Formulation of a planning package for development of tourism in Mirsharai Upazila, and also to accommodate future changes in existing land use pattern, socio-economic condition of the area and quality of life of the people due to establishment of the third sea port in the region in an integrated and comprehensive manner.

APPENDIX 02
Scope of Work of the Assignment

The Web firm shall develop an interactive web site for "Preparation Development Plan for Mirsharai Upazila". The web firm shall also be responsible for web hosting, regular updating and maintenance of web site. The web firm shall extend its services till completion of the project.

Objectives of the assignment:

- To provide basic online information about Urban Development Directorate (UDD) and Development Plan for Mirsharai Upazila to all .
- To provide online information on ongoing activities of Development Plan for Mirsharai Upazila Project
- To provide online upcoming activities Development Plan for Mirsharai Upazila Project
- To upload and download the GIS based data (both spatial and attribute) and subsequent query table on the said database for all users
- To enable viewer of the website to comment on the activities and provided information about MSDP Project in an interactive manner.

DESCRIPTION OF WEB DESIGN

- Web site should be developed with **PHP.**
- **Security** (for preventing hacking) for the site is the top most priority and for that, need special attention for designing **ERD (Entity Relationship Diagram)** as well as coding.
- Home and other interior pages' design should be professional and attractive with browser (**Internet Explorer, Mozilla, Chrome)** independent.
- Well-designed navigation is highly required so that site viewers can easily find what they are looking for
- Organization overview, policies, rules and regulations etc. pages
- Admin access, Login, Logout, User management with changing password feature.
- Secure and user friendly admin panel for all the administrative functions
Map View JPG format with 3/4 layers where JPG images are downloadable.

o Underline First layer: Full District image containing Upazilas, while clicking one upazila, goes to second layer and shows the details about upazila
o Second layer: Upazila image containing Unions, while clicking one Union   goes to third layer and shows the details about Union
o Third layer: Union image containing Wards, while clicking one Ward, it goes to fourth layer and shows the details about Ward
o Fourth layer: Ward image containing Areas, while clicking one Area, it shows the details about Areas

- Each layer contains the list of its corresponding sub-layer along with the images.
    - Each layer also contains the details of District/Upazila Master Plan / growth center master plan (PDF Report) which is downloadable
    - Web-site viewers or admin user can comment across a report or an image on basis of the privilege and that comment can only be deleted from Admin panel Admin level legends are visible only for admin
    - Admin can upload the images of four different layers
    - Log files or report files that shows who changes what at when
- For security purpose weekly backup is required

**Officer in charge/PD has rights to change or add new design or feature or layout consulting with web firm.

MUST REQUIREMENTS FOR IT FIRM

I. The Firm must have minimum 5 years working experience in IT Sector (Software).

II. The Firm must be a member of a government recognized ICT Association e.g. BASIS.

III. The Firm must have experience in developing at least 5 Government Websites or Web Applications.

IV. The firm must have experience in managing Servers, Network and other IT services in Government organizations

V. The firm must be complied with the full document supplied with the tender after having the official approval from the UDD officials.

VI. The firm must have their own personnel and official set up.

GENERAL CONDITION

1. The proposed web page should be very much interactive & professional where anybody can make necessary comments while observing the on-going activities with their rights.
2. It should be run according to the guide line and policy of "Information Act, 2011".
3. It should not harm any person in Bangladesh regarding his/her basic rights.
4. It should be focused on the project of "Mymensingh Strategic Development Plan, 2011-2031".
5. Domain, and unlimited web hosting shall be provided by the developer and supplier of the service
6. Domain-URL, Host-URL and User Key Panel Password shall handed over to the client after development of the web site, and the developer and supplier of the service may use the Domain-URL, Host-URL and User Key Panel Password as required for activation and regular updating of the web site. But the developer and supplier of the service shall not handover the Domain-URL, Host-URL and User Key Panel Password to anybody else. In such cases, penalty may be imposed on the developer and supplier of the service or may be treated as "Breach of Contract".
7. The developer and supplier of the service shall not change any password without prior permission of the client.
8. The developer and supplier of the service shall ensure protection against hacking and in such cases, shall be responsible for restoration of the web site.
9. Day-to-day update on GIS based database (spatial and attribute) and the subsequent query builder and its input data from the outside viewer should be uploaded within next 24-hours and automated answer should be reached to the concerned viewer.
10. All viewers should be registered online before entering into the content of the web site.
11. The web site shall be linked with all government agencies especially UDD and MOHPW.
12. The developer and supplier of the service shall collect necessary data and information from the PD or Officer-in-Charge, and update the web site accordingly as and when necessary. No expenses shall be charged for the said purpose by the developer and supplier of the service.
13. Separate Meta (programming) file shall be created for each component of web site as directed by the PD or Officer-in-Charge.
14. The web site shall contain web mail service.
15. The developer and supplier of the service shall supply hard copy and soft copy of each and every opinion/comment/suggestion etc. of the viewer of the web site to the client at the end of each week.

DOMAIN NAME

The registration for domain name of this web site is held for 2 years and after that officer in charge/PD (Preparation of Development Plan for Mirsharai Upazila) will have the rights to decide whether continue or not.

Domain name is purchased by the UDD name.

Domain Name shall be determined in consultation with PD

Signature of the Bidder	Signature of the Project Director	Signature of the Director

WEBSITE HOSTING

Web-site hosting shall be purchased by the UDD name.

Information about hosting type:

Disc Space	:	10 GB / Year
Bandwidth	:	20 GB / Month
Database Type	:	Mysql relational database
Email Account	:	50
Addon Domain	:	20

** Database should have Spam blocking and assassin system and Anti-virus scanning feature and also have **'SSL Secure Website Access***',*

MAINTENANCE and SERVICES for web-site MANAGEMENT

- The maintenance and services will be organized with the consultation with Project Director.
- The data upload & download will be held by the direct supervision of PD or by nominee.
- Any password related to web page development will be provided by PD or by nominee and it will not be changed without his/her consent.
- The web page of the MSDP project will be kept free from any type of intrusion like virus or hacking or related activities.
- The service shall cover development of an interactive web-site. The service provider shall update information relating to ongoing activities of the " Preparation of Development Plan for Mirsharai Upazila " including ward and union map at scale of 1 :3960, graphs, figures, attribute data and other relevant data and information. The viewer of the web-site would be able to provide necessary online suggestions a comments relating to corrections or modifications on Preparation of Development Plan for Mirsharai Upazila project area or as per his/ requirements. At the same time, the viewer shall be able to obtain the printout of relevant documents. In such cases provisions shall be made to enter detailed particular of the viewer including name, address, telephone number, cell number, email and at related personal information. In addition the website would provide information relating to total number of viewers hit in each day and number of viewer currently viewing the website.
- All the updating or related activities will be performed by the service provider at the premises of UDD at least two (02) days within a week.
- The service provider will be held responsible to provide "On-Job training" (minimum 3 persons of the project) related to his activities under the services with the consultation with PD of Preparation of Development Plan for Mirsharai Upazila Project.
- In case of defalcation/defaults/irregularities by the service provider organization, the project authority/PD will have full rights to take legal measures against the service provider organization.
- The issue of IT and VAT deduction at source from the service provider organization will be settled as per government rules.
- Any modification of this contract shall require an amendment in writing between both parties duly signed by the authorized representative of the service provider organization and project director (PD) of the Preparation of Development Plan for Mirsharai Upazila.
- The service provider organization will provide all information related to the project webpage to PD, Preparation of Development Plan for Mirsharai Upazila, UDD and will not hide any web related necessary information

The Project Team for Interactive Web Development should be constituted as Follows:

A. Web Developer -1 Persons (1x24 = 24 mm.)

Qualification: B.Sc. in Computer Science, Mathematics, Information Technology, Statistics or other related field.

Experience: At least 5 years' experience in the following arena:

- Experience developing with HTML5, CSS, JavaScript, and general Web 2.0 techniques
- Must have in-depth knowledge in Web Programming using PHP, MySQL. Which meant he must have clear concept on OOP PHP development and also Database Design and Queries.
- Expertise to configure, install and build open source tool and code base
- Understanding of networking (LAN and WAN) and Server management (Linux and Windows)

•Expertise standard web application using PHP and/or ColdFusion with MySQL/SQL Server database.

•Expertise Coding/Bug-fixing/Unit-testing following the provident standards.

•Able to Analyze, design and develop application in Web based using: PHP5.

•Extensive knowledge in CORE PHP5, MYSQL,

•Excellent knowledge in Javascript tools like JQuery, Mootools & Protorype & AJAX.

•Excellent knowledge in CSS2/CSS3, xHTMLlHTiJ'lL5 & DIV based development is must.

•Experience of converting PSD to xHTML.

•Knowledge in Open source Tools.

•Knowledge in Zend Framework/Codelgniter/ CakePHP,/Symfony is plus.

•Also familiar with GIS/RS software including ERDAS Imagine, Imagine – Objective ArcGIS 9 and above, Arc SDE, ArcGIS server

Responsibility: (i)Write well designed, testable, efficient code by using best software development practices (ii)Create website layout/user interface by using standard HTML/CSS practices (iii)Integrate data from various back-end services and databases (iv)Gather and refine specifications and requirements based on technical needs (v)Create and maintain software documentation (vi)Be responsibile for maintaining, expanding, and scaling our site (vii)Stay plugged into emerging technologies/industry trends and apply them into operations and activities (viii)Cooperate with web designers to match visual design intent (ix) Development of a custornize GIS related interactive Website. (x) Installation and troubleshooting of GIS based web link in UDD project office and head office as well. (xi) Any other task relating to GIS based Web development as assigned by PD.

B. Graphic Designer- 1 Persons (1x9 = 9 mm.)
Qualification: Diploma in Graphic Design, or Bachelor degree in Computer Science, Informatio Technology, or other related field.

Experience: At least 5 years' experience in using Adobe Photoshop, Adobe Illustrator, Quark Express, 3D Studio Max, InDesign Acrobat etc. Highly expertise in web relatedcolour separation, graphic design and animation. Also advance knowledge in logo machine, maskin machine and layout machine as well.

Responsibility:
(i)   To be responsible for graphic design and animation for the web site. (ii) To prepare layout the web page (iii) To ensure the graphic quality and visual effects of the web page. (iv) troubleshooting of graphic related features of the web page. (vi) Any other graphic and animation related Jobs as assigned by PO

C. Creative Video Editor (1x9= 9 mm.)
Qualification: Diploma in video editing, or Bachelor degree in Computer Science, Informatio Technology, or other related field.

Experience: At least 5 years professional experience in relevant field. Advertising Ageny, Design/Printing/Publishing, DTP House, Film Production, Online Newspaper/ News Portal, Satellite TV, Software Company, Web Media/Blog.

Responsibility:
(i)Good Knowledge on News Media and Visual Media. (ii)Have to have the ability to work in a multi-platform environment. (iii)Proven working experience in video editing. (iv)Solid experience with digital technology and editing software packages. (v)Demonstrable video editing ability with a strong portfolio. (vi)Thorough knowledge of timing, motivation, continuity etc. (vii)Familiarity with special effects, 3D and compositing. (viii)Creative mind and storytelling skills. (ix)Manipulate and edit film pieces in a way that is indistinguishable but appealing to the audience

Transfer of Knowledge (training) (when appropriate);
•Presentation on technical proposal along with relevant licensed hardware and software in front of PEC

Signature of the Bidder	Signature of the Project Director	Signature of the Director

●On job training programme for Project Personnel
List of reports, Schedule of deliveries, period of performance;

Report submission schedule and Mode of Payment for Interactive Web Site Design, Development and Hosting

Reports shall be presented and illustrated in a clear and concise professional manner, including maps, plans, diagrams and other graphics. Schedule of submission. Every 3 month after web site progress report would be submitted project director office.

The client, UDD shall provide necessary data, information and maps only. On the other hand, the developer and service provider shall be responsible for all necessary hard and software installation including management and operational procedure within the hyper domain.

APPENDIX-03
BIDDING FOR TENDER

3.1   Contents of the Technical Proposal
According to the provisions laid in the Public Procurement Regulations 2008.

3.2   Financial Proposal
Financial proposal should be prepared as per following format in the firm's own letter head.

Format of Financial Offer

Sl No	Description of Survey and Studies	Unit (Area/no.)	Rate (TK.)	Total Amount (TK.)
01	Design, Finalization and Activation of Web Site			
02	Web Site Updating and Maintenance			
03	Project Team of Web Firm			
	TOTAL			

N.B. – Above Quoted rates should be inclusive of the cost Salaries, Management, Transportation, Contingency, Incidental, Income Tax & VAT and other related cost including printing and binding of maps and reports etc.

Signature of the Bidder   Signature of the Project Director   Signature of the Director

APPENDIX-04
FORMAT OF CURRICLUM VITAE AND PROJECT TEAM
4.1   Format of Curriculum Vitae of Professionals
According to the provisions laid in the Public Procurement Regulations 2008.
4.2   Format of the Proposed Project Team

Sl. No.	Position	Name	Age (in Years)	Length of Experience (Year)	Qualification	Man month
1.						
2.						
3.						
4.						
5.						

4.3   Format of the Major Experience in Similar Project Completed During Last 05 Years

Sl. No.	Name of the project	Name of the Client	Cost of the Project	Project Duration
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Signature of the Bidder   Signature of the Project Director   Signature of the Director