

Minutes issued on: 13th May, 2020

“Hiring of an agency for capacity building and developing land use and land cover maps for 400 villages to support the implementation of the Meghalaya Community Led Landscapes Management Project (MCLLMP) under MBMA”

Pre-proposal conference and written queries raised by shortlisted consultants

Date of Pre- Proposal Conference: February 24, 2020; 1100 Hrs.

Attended by:

- 1) Lam Shabong, Director, MINR
- 2) James T. Kharkongor, DPD, NRM - CLLMP
- 3) Banteilang S. Rumnong, DPD, CLLMP
- 4) FettlemanDohling, Manager, GIS
- 5) Sameer Nigam, Head – Bidding Division, RMSI
- 6) RajendraBhuyan, Manager (SW), RMSI
- 7) ParulSaklani, Consultant, Sattva

Sr. No.	Clause No. & Page No.	Original Clause in RFP	Change Requested/Clarification required	MBMA Response
1.	Expected outcome, Point No. 1, Page No. 63	Development of robust Land Use and Land Cover (LULC) monitoring analysis methods using various sources of satellite imageries for the project....	We request the following clarification in this section: 1) Request you to please clarify the years to be considered for temporal analysis. 2) Appreciate if the month and year for temporal analysis can be defined.	1) Base Year: Nov-Dec 2012 to Jan-Feb 2013 Base Year: Nov-Dec 2017 to Jan-Feb 2018 2) Temporal LULC Maps of 400 villages of 2 base years (400+400=800) should be prepared according to the size of the village coming under 1:1000 or 1:2000 scale for 400 villages

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2.	Expected outcome, Point No. 2, Page No. 63	Preparation of temporal LULC and soil maps of identified 400 villages (including updating the maps of 115...	<ol style="list-style-type: none"> 1) We understand that the soil maps will be provided by the department, the selected agency has to register and use the same in GIS. Please confirm. 2) We understand that for LULC classification NRSC guideline is to be used for Level II classification i.e. it has to be mapped at 1:10,000 scale. Please confirm. 3) Please confirm that LISS-4 images will be provided by the Client for the preparation of LULC maps at 1:10K or the selected agency has to procure the same. 	<ol style="list-style-type: none"> 1. Preparation of Soil maps is no longer required. Please refer to amendment No 4. 2. The client will require Level III Classification but at the scale of 1:2000 for all 400 villages. 3. The resolution of imageries needs to be Liss-IV merged with Carto Sat 2 or better which will be provided by the client and the agency should also take reference from Google Earth images. High resolution images, wherever required, will be procured by the client.
3.	Expected outcome, Point No. 6, Page No. 64	Integrating thematic layers of LULC maps and NDVI maps and other spatial datasets into the web GIS platform	<ol style="list-style-type: none"> 1. We understand that the Development of web GIS platform is to be done on open source. Please confirm. 2. We understand that the agency will provide the platform and necessary server space for hosting web-GIS. Please confirm. 	<ol style="list-style-type: none"> 1. Development of Web GIS Platform is not required by the agency. The agency can share all the GIS data through FTP or any other source as deemed fit. 2. As responded above
4.	Expected outcome, Point No. 9, Page No. 64	Providing technical support and handholding of the MCLLMP GIS team for periodically updating GIS maps for one year	<ol style="list-style-type: none"> 1) We understand that the selected agency has to provide handholding support only. All logistics and arrangement of images will be done by the Department. 2) The maximum estimated man-month is 12 months for technical expert, no man-month is mentioned for one-year handholding support, please suggest. Request to kindly add the man-month for the same as it has financial implications. 3) Is the agency has to provide separate costing for 	<ol style="list-style-type: none"> 1. Considering the current pandemic situation, the selected Agency will have to provide handholding support onsite/offsite to all GIS Staffs at Head Office/District however if the situation allows the agency to travel, they should be able to provide onsite training accordingly. The cost of travelling will be reimbursed on actuals. 2. It is expected that 2 Geo-Spatial Experts can provide hand holding support beyond the completion of preparation of temporal LULC and other related maps. (Please refer to the

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			one-year handholding support. Please confirm.	ToR and amendment No 4). 3. One-year hand holding will start from date of commencement of project and the costing for the same needs to be provided by the Firm (please refer to the reply above and ToR)
5.	Expected outcome, Point No. 10, Page No. 64	Generating DEMs, slope maps and micro catchment areas/spring maps	1) Please confirm the spatial resolution at which DEM is to be Generation. 2) For the generation of 2 m resolution, DEM Cartosat-1/2 stereo pair images are to be used, please confirm if the same will be provided by the Client.	1. Generation of DEM is no longer required. Please check addendum 2. Yes, the client will provide the CARTO DEM for generation of other related maps mentioned in the addendum.
6.	Consultant Obligation, Point No. 2, Page No. 68	Agency is expected to work in the office of the CLLMP and work closely with the State Program Management Unit	We understand that the selected agency has to deploy one full-time resource at the CLLMP office and other resources may work at selected vendor premises. These resources may have to visit the CLLMP office as per requirement. Please confirm.	Please refer to the clause under 'Consultants Obligation' of the ToRs, which says "Agency is expected to work in the office of the CLLMP and work closely with the State Program Management Unit, District Program Management Unit". However, considering the current pandemic situation, if the agency is unable to travel, the liability of any such cost should not fall on the client. The selected Agency will therefore have to provide handholding support onsite/offsite to all GIS Staffs at Head Office/District however if the situation allows the agency to travel, they should be able to provide onsite training accordingly. The cost of travelling will be reimbursed on actuals.
7.	Section 7 Terms of Reference	Preparation of temporal LULC and soil maps of identified 400 villages (including updating the maps of 115 villages	What is the soil classification schemes to be followed?	Preparation of Soil maps is no longer required. Please refer to amendment No 4

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8.		for which LULC maps have already been prepared) using standard and appropriate classification methods (Level II classification) using medium to high resolution satellite imageries (10-meter resolution or better). The GIS team of MCLLMP will be provided on the job training by involving them in the preparation of the LULC, soil maps, etc.	Kindly provide the area of interest in terms of square kilometers (sq. km.)	1,300 Sq. Km approximately
9.			How many dates need to be used for preparation of temporal LULC and soil maps over given 400 villages?	Please refer to Point No 1 above.
10	Section 7 Terms of Reference	Generation of relevant maps required for the Project	Please elaborate the list of maps to be generated here	Temporal LULC Mapsof 400 villages of 2 base years (400+400=800) as mentioned at Point 1 above, slope maps, contour maps, drainage maps , micro catchment areas/spring maps, NDVI and Agro-Climatic maps (temperature, rainfall & altitude/elevation) Please refer to amendment No 4.
11	Section 7 Terms of Reference	Generating maps on high resolution for the mining affected areas in the Project villages.	Will department facilitate flying of UAVs (Unmanned Aerial Vehicles) over mining affected areas in the mentioned villages?	Not needed

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12	Form Tech 2 (Page 42)	B- Consultants Experience List only previous similar assignments successfully completed in the last [03] years	[03] Years' is too short period. It is being requested to make it [05] years.	No Change
13	Form Tech 3 (Page 44)	B - On Counterpart Staff and Facilities	Kindly confirm if technical staffs as well as support staffs will be provided to the consultant on latter's request.	MBMA will provide one focal point for the day to day coordination to facilitate the work, however no technical or support staff will be dedicatedly provided to the firm. In addition, the GIS team of the project will work closely with the selected agency onsite/offsite, where latter's responsibility will also be to provide on the job training during the development phase.
14	Form Tech 4 (Page 45)	a) Technical Approach and Methodology Please do not repeat/copy the TORs in here	The Technical Approach and Methodology would be based on the Scope of work defined in the TOR. Kindly clarify the statement 'Please do not repeat/copy the TORs in here '.	The statement is clear, you are not required to copy paste the ToR in your approach but provide your understanding and how you will approach to fulfil the requirement of the ToR.
15	Section 7 – Terms of Reference (Page 62)	II. Objective The objective includes updating the already prepared maps of 115 villages	We assume that the already prepared maps of 115 villages will be readily available with MBMA, Shillong and will be given to successful bidder at once. Also, detail about available data layers, source used to create those data etc would be helpful. Kindly clarify.	Updating of the current LULC Maps is no longer required to be done by the agency. Source used: Arc GIS Software Data used: Google Earth Images, LISS IV and DEM.

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16	E- DATA SHEET (Page 31)	The Client will provide the following inputs, project data, reports, etc. to facilitate the preparation of the Proposals: project Implementation Plan or any other relevant information and reports to assist the short listing consultants.	Project details like project Implementation Plan or any other relevant information and reports will be given to short listing consultants at which stage. Also, what will be the medium for providing such information? Kindly clarify.	Most of the information is available on www.cllmp.com ; if anything further required, please write to mbdaprocurement@gmail.com
17	Section 7 – Terms of Reference (Page 63)	III. Scope of work Preparation of LULC and Soil maps using medium to high resolution satellite images (10m resolution or better)	For village level LULC preparation, satellite images higher than 10m resolution may give better output. In such case, we assume that high resolution satellite images will be provided by MBMA, Shillong to successful consultant free of cost. Kindly clarify.	The client will provide satellite imageries to the agency.
18	Section 7 – Terms of Reference (Page 64)	IV. Scope of work Providing technical support and handholding of the MCLLMP GIS team for periodically updating GIS maps for one year	Should we assume that MBMA desires the successful consultant to provide technical support and handholding of the MCLLMP GIS team for one year after the project period of 12 months. Kindly clarify.	<ol style="list-style-type: none"> 1. It is expected that 2 Geo-Spatial Experts can provide hand holding support beyond the completion of preparation of temporal LULC and other related maps. (Please refer to the ToR). 2. One-year hand holding will start from date of commencement of project and the costing for the same needs to be provided by the Firm (please refer to the reply above and ToR)

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19	VI (Page 69)	Client's Input and Counterpart Personnel Data and Facilities to be provided by the Client 3) The Client may provide at its premises, provide or assign a room to the Agency on request of the latter. 4) Client will provide Workstations and ArcGIS to facilitate generation of maps and layers.	We do understand that the client will provide all the workstations including ArcGIS software for generation of maps and layers. The client will also provide sufficient space/premises for the consultant's person to execute the work in Shillong or any other location as required. The client will also provide accommodation /guest houses for consultant's personnel. Vehicles required for the field work will also be provided by the client. Kindly clarify.	If the agency is working remotely than the client will lend the licensed ArcGIS software to the agency only during the tenure of the project., however if the agency is working onsite, the client shall provide some workstations in the office premises for the selected Agency, where they will work closely with the GIS team. MBMA can facilitate the accommodation/guest houses for Agency personnel. However, the cost for the same will be borne by the Agency. Vehicles for field work, etc. will be arranged by the client, and the request needs to be made in advance for the same. All the cost attached to the above should be borne by the selected agency.
20	Administrative maps (Scope of Work)	LULC and soil maps/other relevant maps such as NDVI etc of 400 villages	Please confirm if client will provide village level GIS boundaries.	Yes
21	General clarification (Scope of Work, Part-C)	Generating maps on high resolution for the mining affected areas in the project villages	Please could you elaborate on the phrase "mining affected areas". Also confirm whether: a) Mining affected areas need to be identified by the consultants; or b) The client will provide the maps or spatial details of mining affected areas	Mining affected areas means coal, limestone, stone and sand quarry in CLLMP villages. a. Yes. b. The client will only provide sample points/maps of mining affected areas however the selected agency will require to generate the areas and feature class of the mining affected sites.

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22	Digital Elevation Models (DEM) Resolution (Scope of Work, Part-C)	Generating maps to delineate micro catchment areas/spring sheds by developing digital elevation models (DEMs) and slope map of the project villages	<p>a) Please clarify the expected resolution of the DEM model.</p> <p>b) We assume that DEM available in open source platform e.g. ASTER/SRTM would be used for generating slope maps and micro catchment areas/spring maps. Please confirm. If not, then please confirm MBMA will provide required inputs e.g. stereo pair satellite images or contour data for generating DEM. Please also confirm required resolution and accuracy of DEM</p>	Please refer to Point No 5 above.
23	Digital Elevation Models (DEM) Resolution (Scope of Work, Part-C)	Generating maps on high resolution for the mining affected areas in the Project villages.	<p>a) For “Generating maps on high resolution for the mining affected areas, we understand that maps will be created on high resolution images</p> <p>If yes, please confirm the image resolution and who will provide the images.</p> <p>b) Please share total area and feature class details for creating maps along the mining sites.</p>	<p>a) The resolution of imageries needs to be Liss-IV merged with Carto Sat 2 or better which will be provided by the client and the agency should also take reference from Google Earth images. High resolution images, wherever required, will be procured by the client.</p> <p>b) 1,300 Sq. Km approximately. The client will only provide sample points/maps of mining affected areas however the selected agency will require to generate the areas and feature class of the mining affected sites.</p>

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24	Satellite imageries (Scope of Work, Part-A)	Develop high resolution imageries	Please clarify whether a) The client will procure concerned satellite imageries for processing and use; or b) It is expected from the consultant to budget the cost of acquisition of satellite imagery in the financial proposal	The client will provide satellite imageries to the agency.
25	LULC Maps (Scope of Work, Part-A)	Updating the maps of 115 villages for which LULC maps have already been prepared)	a) Please could you provide us name of villages along with spatial information (Area of Interest, Ex-3 Sq Km from Village center) and resolution to have better understanding about project area and ground truth estimation. b) Please provide Level I and II feature class required for Landuse, Landcover mapping c) Could you please elaborate / list out “other relevant maps required for the project”? d) Please provide us existing LULC map for one or two village out of 115 villages to have figure out on quality and required details from new LULC maps e) Please could you let us know spatial accuracy requirements for LULC and other relevant maps f) Please elaborate more on “Develop high resolution imageries for references”. g) Please could you confirm the input image spatial resolution as efforts to create map data varies on different resolution images. h) RMSI assumes that no field survey (DGPS) is required for geo-referencing of input satellite images, please confirm.	a. The List of villages would be provided to the selected Agency. The resolution of imageries needs to be Liss-IV merged with Carto Sat 2 or better which will be provided by the client and the agency should also take reference from Google Earth images. High resolution images, wherever required, will be procured by the client. b. Please refer NRSC guideline for Level III LULC classification. c. Temporal LULC Maps of 400 villages of 2 base years (400+400=800), slope maps, contour maps, drainage maps , micro catchment areas/spring maps, NDVI and Agro-Climatic maps (temperature, rainfall & altitude/elevation) Please refer to amendment No 4. d. Client Will be providing sample LULC maps e. 90% or above accuracy for LULC and other relevant maps as mentioned above. f. No longer required. g. As responded at (a) h. Yes

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26	Ground Truthing (Scope of Work Expected Outcome)	Carryout ground truthing for at least 10% of sampling	Please clarify the expectations for the ground-truthing.	The client will carry out the ground truthing. Please refer to amendment No 4
27	Processing of satellite imageries (Client's input and counterpart personnel including data and facilities to be provided by the client)	Client will provide workstations and ArcGIS to facilitate generation of maps and layers	<p>a) Please specify number of workstations and ArcGIS software licenses would be provided by authority to the selected firm for data processing.</p> <p>b) Please confirm if we can propose additional any other software e.g. ERDAS imagine, Global Mapper required for project execution, same would be provided by Authority.</p> <p>If not, please clarify whether the client expect the consultant to budget the cost of such required licensees.</p>	<p>a) Please refer to Point No 19 above.</p> <p>b) Any additional software required for the project will be mentioned in the Software Requirement Study (SRS) chapter of the Inception Report, and shall be procured by the client, unless agreed with the Agency to be reimbursed later.</p>
28	Location of work (Consultant's Obligation)	Agency is expected to work in the office of the CLLMP	<p>We assume that activities such as data development, tool development can be done at agency's location; and other activities such as requirements analysis, technology demo and trainings have to be done at project location Shillong.</p> <p>It is not mandatory to do all the project activities at Client's location (Shillong). Please confirm</p>	Please refer to Point No 4 above.
29	Landscape change analysis (Scope of Work)	Undertake activities pertaining to the development of a methodology for landscape change analysis and monitoring temporal and spatial land use / land cover changes using satellite imagery	a) Please clarify the specific requirement for landscape change analysis and monitoring temporal and spatial LULC changes using satellite imagery.	<p>Base Year: Nov-Dec 2012 to Jan-Feb 2013 Base Year: Nov-Dec 2017 to Jan-Feb 2018</p> <p>Based on temporal and spatial imageries change analysis will be mapped and monitored for period of 3 – 5 years. The layers generated may be used for the landscape change analysis.</p>

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30	Training and workshop (Scope of Work, Part-D)	Organizing training and workshops on quarterly basis on all the various activities undertaken by the agency	Please clarify: a) Where the training or workshop is to be conducted? Whether at the SPMU or at other locations? b) The client will facilitate arrangements for refreshment for the training and workshops; OR the consultant is expected to factor the cost of refreshments.	a. It will be conducted in two separate regions that is Khasi region and Garo region either virtually or physically as the situation demands b. The client will facilitate arrangements for venue, refreshment, etc. for the trainings and workshops. Agency will have to arrange for travel and resource on their own for their staff.
31	% Payment (Deliverables & Timelines)		There is no payment % mentioned under this deliverable. We propose that it should be 10%.	No longer required
32	% Payment (Deliverables & Timelines)	Organizing training & workshops on a quarterly basis, provision of technical support....., draft report submitted	Since all these 3 activities would close within 12 months of the contract therefore 40% of the payment will happen at the end of the project. We propose that 30% should be reduced to 20% (spread equally among the 2 deliverables – Organizing training & workshop and Provision of technical support.....).	No Change
33	Para 21.1 Clause No. (iii)	Key Expert qualification and competence for the assignment	What will be the theme of the training which the client wants to provide the local community? So, the training expert of relevant qualification can be positioned [position K-5].	The selected agency will provide appropriate training on extracting spatial information from mining sites, creation of agro-climatic zones, generation of micro catchment areas/spring maps and other advanced GIS techniques/tools only to the GIS staffs placed at Head Office/Districts and not to the community directly.
34	Para 21.1 Clause No. (iii)	Key Expert qualification and competence for the assignment	There is no provision of IT experts whereas the deployment of Web-GIS is required an IT expert.	The IT expert is not required as Web-GIS need not be developed.

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35	Para 21.1 Clause No. (iii)	Key Expert qualification and competence for the assignment	Requisite qualification of an individual expert is also lacking in the document.	Please refer to the TOR for the Qualification of Key and Non-Key Experts.

Sd/-
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