

Government of West Bengal Irrigation & Waterways Department

Jalasampad Bhaban, Saltlake, Kolkata - 91

Memo No: 485/IB-IW-14013(11)/7/2021-SECTION(IW)

Date: 22.03.2022

From: M. Chakraborty

Joint Secretary to the Govt. of West Bengal.

To: Chief Engineer-Design & Research

I & W Directorate,

1st floor, Jalasampad Bhaban, Kolkata-91

Subject: Administrative Approval towards engagement of "Leads connect Services Private Limited" as consultant for the work "Consultancy work for assessment & demarcation of flood prone areas of the state of West Bengal using temporal satellite imagery under I & W Dte., Govt.

of West Bengal".

Traditional methods of flood mapping are based on ground surveys and aerial observations, but when the phenomenon is widespread, such methods are time consuming and expensive; furthermore, timely aerial observations can be impossible due to prohibitive weather conditions. An alternative option is offered by satellite remote sensing (RS) technology. In recent decades optical data acquired by sensors onboard spacecraft have been used in many studies to map inundated areas over regions characterized by very different conditions in climate, morphology and land use. None of the estimates of the flood inundated areas in the state given above have been based on such latest technologies of remotely sensed satellite images, use of Geographic Information System (GIS) etc. Only in a very recent study in 2020 the Flood Prone Areas of the state of West Bengal has been delineated by CWC by processing the satellite images. The total flood prone area of the state has been found by CWC to be about 1.251 MHa by employing the above process. Such a figure happens to very under estimated in comparison with the existing data available with the State Government. CWC's assessment of Flood Prone Area in West Bengal has been found to be not devoid of limitations and/or approximations to a substantial degree in analyzing and getting the output in Google Earth Engine (GEE) and hence has been commented to be liable to be provide erroneous results in the form of numerous discrete, simplified polygons, huge no. of small polygons, especially in arid regions etc. Hence it has been decided that a proper scientific assessment of the flood prone area over the entire state needs to be done using latest technologies and available RS and GIS data. The instant consultancy work has been envisaged to take up the above task.

In view of above, the undersigned is directed to say that the Governor is pleased to accord Administrative Approval towards engagement of "Leads connect Services Private Limited" as consultant for the work "Consultancy work for assessment & demarcation of flood prone areas of the state of West Bengal using temporal satellite imagery under I & W Dte., Govt. of West Bengal", at an aggregate estimated cost of ₹ 27.78 lakh (Rupees twenty seven point seven eight lakh) only, for implementation during 2022-23 subject to observation of all financial norms. The said expenditure for the consultancy work will be borne out under chargeable h/a - "32-2711-01-001-00-004-28-02-V" of the I&W Deptt.

This Order issues with the concurrence of the Financial Advisor, Irrigation & waterways Department vide his U.O. No. FA/IWD/72/2021-2022 dated- 20.03.2022 and approval of the Principal Secretary of this Department.

Concerned Superintending Engineer and Executive Engineer may please be kept appraised from his end.

22|3|2022 (M. Chakraborty) Joint Secretary to the Govt. of West Bengal.

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Memo No: 485/1(3)/-IB-IW-14013(11)/7/2021-SECTION(IW) Date: 22.03.2022

Copy with copy of Annexure forwarded for information to the:

- 1. The Principal Accountant General (G&SS Audit), W.B., Treasury Buildings, Kolkata-01.
- 2. The Principal Accountant General (A&E), W.B., Treasury Buildings, Kolkata-01.
- 3. The Financial Advisor, I&WD, 1st floor, Jalasampad Bhaban, Kolkata-91.

(M. Chakraborty)
Joint Secretary to the
Govt. of West Bengal.