PROJECT IMPLEMENTATION UNIT (PIU)
PUNJAB URBAN LAND SYSTEM ENHANCEMENT (PULSE)
Punjab Land Records Authority (PLRA)
Government of the Punjab
****

REQUEST FOR EXPRESSION OF INTEREST (REOI)
(CONSULTING SERVICES – FIRMS SELECTION)

Country: Pakistan
Name of Project: Punjab Urban Land Systems Enhancement (PULSE) Project
Contract Title: Hiring of Consultancy Firm for Development of a Machine Learning & Artificial Intelligence Model for Time-Series Analysis to Find out Encroachment and Change Detection
Credit No.: 7041-PK
Reference No. PK-PLRA-474570-NC-RFQ

The Project Implementation Unit, Punjab Urban Land Systems Enhancement (PULSE) Project, Govt. of Punjab has received financing from the World Bank toward the cost of the Punjab Urban Land Systems Enhancement (PULSE) Project, and intends to apply part of the proceeds toward payment of Development of a Machine Learning & Artificial Intelligence Model for Time-Series Analysis to Find out Encroachment and Change Detection.

The objective of develop a cloud-based machine learning application capable of processing free-source datasets for time-series analysis of building footprints, calculating specific indices such as the Normalized Difference Built-up Index (NDBI), and implementing a deep learning model for classification based on Sentinel satellite imagery. The application should support both online and local dataset inputs and generate classified building footprint data, height information, and shapefiles from classified raster data.

The detailed Terms of Reference (TOR) for the assignment can be found at the websites: https://pulse.gop.pk/ or can be obtained at the address given at the end.

The PIU, PULSE now invites eligible consulting firms to indicate their interest in providing the required services as explained in the TORs. Interested firms should provide the following information demonstrating that they have the required qualifications and relevant experience to perform this assignment. Key Experts will not be evaluated at the shortlisting stage. The parameters for evaluating EOI responses are given below: -

i. Registration with Income Tax and Sales Tax Department
ii. Valid/active NTN and GST Number with Income Tax returns of last Three Years;
iii. Having at least 3 years of eexperience insimilar nature geospatial machine learning applications projects in Pakistan or other countries.
iv. Strong Deep Learning and Statistical Techniques Experience, including but not limited to Neural Networks, Transfer Learning Techniques, Image Segmentation and Spatial Imagery Knowledge
v. Proven experience in cloud-based application development and deployment projects.
vi. Strong background in handling satellite imagery, geospatial data processing, and multi-source data integration.

Note: The firm must provide the documentary evidence of the assignments carried out.

The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" dated November 2020 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected. Firms interested to participate in JV should submit information for each partner, which will be assessed independently regardless of capacity/experience of the other partner. For firms in arrangement of lead sub-consultant, only the experience and capacity of lead firm will be assessed. However, such arrangements should be clearly mentioned in Expressions of Interest Response.

A Consultant will be selected in accordance with the **Consultant Qualification Selection (CQS) Method** set out in the Procurement Regulations.

Further information may be obtained at the address given below during office hours from 0900 to 1700 hours. This REOI is also available on the website: https://pulse.gop.pk/.

Expressions of interest must be delivered in written form to the address below (in person, or by post) by or before 1100 hours on 07th May, 2025.

The assignment title of the consultancy should be clearly written on the front of the envelope or in the subject line.

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