

ORGANISATION	National Institute of Urban Affairs (NIUA)
POSITION	Aerial Photogrammetry Expert
PROJECT NAME	National geospatial Knowledge-based land Survey of urban Habitations (NAKSHA)
DUTY STATION	Department of Land Resources, Ministry of Rural Development, Nirman Bhawan, New Delhi
DURATION	12 months
NATURE OF ENGAGEMENT	Contractual, full-time
AGE LIMIT	Not exceeding 40 years as on prescribed last date of receipt of online applications

About the National Institute of Urban Affairs (NIUA)

Established in 1976, the National Institute of Urban Affairs (NIUA) is a premier institute of Ministry of Housing and Urban Affairs, Government of India, for research and capacity building for urban sector in India. NIUA's broad objective is to bridge the gap between research and practice on issues related to urbanisation. For more than 45 years now, NIUA has been the vanguard for contributing to and building the urban narrative for a fast-evolving urban India. The Institute has been actively working on bringing forth key areas of concern for urban India in order to build the discourse at various scales. It has utilised its competencies in research, knowledge management, policy advocacy and capacity building to address urban challenges and continuously strive to develop sustainable, inclusive and productive urban ecosystems in the country.

About the National geospatial Knowledge-based land Survey of urban Habitations

NAKSHA is spearheaded by the Department of Land Resources (DoLR), Ministry of Rural Development. The core objective of this programme is to create land records in urban areas, ensuring accuracy, transparency, and up-to-date information. This will be piloted in more than 150 cities across the country, with a focus on empowering urban citizens, improving ease of living, and facilitating better urban planning.

Key Responsibility Areas

- Plan, execute, and supervise aerial image collection using drones, aircraft, or satellites, ensuring data quality and coverage for specific project needs.
- Process raw aerial images using photogrammetric software to create 3D models, orthophotos, Digital Elevation Models (DEMs), and contour maps.
- Analyse and interpret aerial imagery for geospatial analysis, identifying patterns, landmarks, and environmental changes.
- Use Ground Control Points (GCPs) and other georeferencing techniques to ensure spatial accuracy of the data.
- Develop and execute LiDAR survey plans, ensuring optimal coverage for land parcel mapping and terrain modelling.

- Determine survey parameters (flight altitude, overlap, scan frequency) to meet spatial resolution requirements specific to land parcel mapping.

Work Experience Required

- Minimum 5 years' experience in the in the aerial photogrammetry technologies in urban land management/ urban development.
- Demonstrated experience working in application of geospatial technologies in large-scale programmes, within the government or public sector.
- Understanding of the urban sector, and knowledge of key national missions including (but not limited to) the Smart Cities Mission, Swachh Bharat Mission, and Atal Mission for Rejuvenation and Urban Transformation.
- Knowledge of LiDAR technology and its integration with photogrammetric data.
- Proficiency in photogrammetric software (e.g., Pix4D, Agisoft Metashape, ERDAS IMAGINE), Geographic Information Systems (GIS), and CAD software.
- Advanced proficiency in GIS and Remote Sensing software and spatial data analysis platforms.
- Familiarity with programming languages such as Python or R for geospatial analysis.
- Excellent verbal communication skills.
- Excellent presentation and policy-writing skills.

Educational Qualifications Required

Essential:

- Masters' degree in Remote Sensing/ Geographic Information Systems/ Geoinformatics/ Geography, or equivalent.

Desirable:

- Professional certifications in digital aerial photogrammetry or equivalent.

Remuneration

At par with the standards established by DoLR, commensurate with experience and skills. Proof of past remuneration (last received salary/ monthly contract payment) would be required.

Application Process

- Applications to be only submitted online through NIUA's portal.
- Only candidates whose applications are complete in all regard and adhere to the prescribed format will be considered.
- Only shortlisted candidates will be notified.

Last Date to Apply: Applications will remain open till the position is closed.