



फोन नः ०८९४१०

नारायण नगरपालिका  
नगर कार्यपालिकाको कार्यालय,  
कर्णाली प्रदेश, नेपाल



## १५ दिने सूचना आह्वान गरेको सम्बन्धमा

प्रथम पटक प्रकाशित मिति २०८२/०६/०८

उपरोक्त सम्बन्धमा यस नारायण नगरपालिकाको वडा नं. १ देखि ११ वडाहरूको जग्गा वर्गीकरण गर्नका लागि Updating of the land use map based on the formulated G.I.S. for the Narayan Municipality, Dailekh को लागि RFP document/ terms of Reference बमोजिम १५ दिन भित्र यस कार्यालयमा सम्बन्धित प्रामर्शदाताबाट आर्थिक तथा प्राविधिक प्रस्ताव पेश गर्नुहुन यो सूचना प्रकाशित गरिएको छ।

प्रमुख प्रशासकीय अधिकृत

बम बहादुर के.सी.

प्रमुख प्रशासकीय अधिकृत

# Terms of Reference (ToR)

For

Updating of the Land Use Map Based on the Formulated GIS Framework for Narayan Municipality, Dailekh District



*gm*  
प्रमुख प्रशासकीय अधिकृत

## 1. Geographical Location

Province:	Karnali
Region:	Mid-Western Development Region
Zone:	Bheri
District:	Dailekh
Municipality:	Narayan Municipality

Narayan Municipality (नारायण नगरपालिका) is an urban municipality located in Dailekh District of Karnali Province, Nepal. It was established on March 10, 2017, as part of the Government of Nepal's federal restructuring that created 744 local units under the Constitution of Nepal 2015. The municipality was formed by merging several former Village Development Committees (VDCs), including Dailekh Bazar, Baluwatar, Chupadi, Layati, Tilepata, and surrounding settlements, with its administrative center located at Dailekh Bazar, one of the most prominent trade and administrative hubs of the district.

Geographically, the municipality lies in the central belt of Dailekh District, spread across 150.60 square kilometers of mid-hill terrain. It is divided into 11 administrative wards. Narayan is bounded by Bhairabi Rural Municipality to the north, Dullu Municipality to the east, Aathbis Municipality to the west, and Kalikot District towards the far north-east. The municipality sits at an elevation ranging from 544 meters in the river valleys to nearly 3,689 meters in the high ridges, creating a diverse climatic gradient from subtropical to temperate conditions.

The municipality is traversed by important rivers such as the Loaha Khola and Chamunda Khola, which provide water resources for irrigation and local livelihoods. Forests, terraced farmlands, and clustered settlements dominate the landscape. Narayan is also enriched with natural resources, fertile valleys, and mixed agricultural production including paddy, maize, millet, wheat, vegetables, and cash crops.

According to the 2011 Nepal Census, Narayan Municipality had a population of around 26,000 people (exact updated figures from the 2021 Census will be incorporated in final reporting). The demographic structure is predominantly Chhetri, Brahmin, Magar, and Dalit communities, with Hinduism as the major religion, followed by smaller groups adhering to Christianity and Buddhism. Nepali is the lingua franca spoken by nearly all households.

Literacy levels are relatively higher than in surrounding rural municipalities, as Dailekh Bazar hosts several schools, higher education institutions, and government offices. Nevertheless, there remains a noticeable gender gap and rural-urban divide in literacy and access to education.

Strategically, Narayan Municipality holds growing importance as the district headquarters and an administrative hub of Dailekh. Dailekh Bazar functions as the center for government



services, commerce, and transportation. The Mid-Hill Highway, along with feeder roads linking to Kalikot, Surkhet, and Jajarkot, passes through or near the municipality, reinforcing its potential role as a commercial and transit hub in Karnali Province.

Narayan is also culturally significant, with ancient temples, heritage sites, and festivals contributing to its identity. The municipality is home to several religious and historical landmarks that attract local pilgrims and visitors, making it not only an administrative and trade center but also a place of cultural and touristic interest.

## 2. Background and Context of the Assignment

Narayan Municipality has already completed the preparation of its local land classification guideline titled “नारायण नगरपालिकाको भू-उपयोग क्षेत्र वर्गीकरण सम्बन्धी तयार गरिएको मापदण्ड तथा आधारहरु, २०७९”, in line with the **Land Use Act, 2076** and the **Land Use Regulation, 2079**. This guideline provides the technical basis for land use zoning within the municipality, ensuring consistency with national policies and standards.

Building upon this foundation, the present assignment is focused on the **GIS-based digital update of the official land use map**. The update will reflect the **current land use scenario** of the municipality while strictly adhering to the zoning framework and classification scheme already approved by the municipality in २०७९ B.S. This process is critical for strengthening planning, development regulation, and sustainable resource management within Narayan Municipality.

It is important to note that the **scope of this assignment is limited to digital updating of zoning layers in GIS**. Parcel-wise cadastral overlay, integration, and database generation fall under the authority of the **Survey Department**, as specified in **Rule 21 of the Land Use Regulation, 2079**. Once Narayan Municipality formally submits the updated land use zoning map, the Survey Department will provide technical support to generate the parcel-based GIS database.

This approach ensures that the updated land use map of Narayan Municipality is both **technically accurate and institutionally aligned**, enabling the municipality to effectively manage land resources, guide urban expansion, protect agricultural and forest lands, and preserve cultural and environmental assets for the future.

## 3. Objectives of the Assignment

### Main Objective

To update the official land use map of Narayan Municipality using the approved local land classification guideline (मापदण्ड तथा आधारहरु, २०७९) and GIS zoning framework, ensuring compliance with the Land Use Act, 2076, the Land Use Regulation, 2079, and national technical standards.

### Specific Objectives



प्रमुख नगराध्यक्ष अधिकारी

1. **Review Existing Data:** Assess the approved land classification guideline (२०७९), the current land use zoning data, and cadastral datasets available with Narayan Municipality, and identify areas requiring update.
2. **GIS-Based Land Use Map Update:** Digitally update the official land use zoning map using GIS technology, reflecting the present land use conditions while adhering to the approved classification and zoning system.
3. **Support Institutional Coordination:** Assist Narayan Municipality in preparing formal communication to the **Survey Department**, requesting parcel-level integration and database generation based on the updated zoning map.
4. **Prepare Final Report and GIS Data Package:** Compile and submit a comprehensive final report along with updated GIS layers, geodatabase, and map books (ward-level and municipality-level).

#### 4. Scope and Key Issues

##### Scope of Work:

The scope of this assignment is limited to the **digital update of land use zoning maps** of Narayan Municipality, using GIS tools and based on the approved guideline “नारायण नगरपालिकाको भू-उपयोग क्षेत्र वर्गीकरण सम्बन्धी तयार गरिएको मापदण्ड तथा आधारहरू, २०७९”. The updated maps will reflect the present land use conditions, ensuring alignment with the Land Use Act, २०७६ and Land Use Regulation, २०७९.

The consultant will:

- Review existing land classification, zoning maps, and cadastral datasets available at the municipality.
- Identify discrepancies or areas requiring updates in the zoning framework.
- Digitally update the land use zoning layers using GIS software (e.g., ArcGIS/QGIS) and apply national standard classification codes, symbology, and formats.
- Validate updated maps with municipal representatives, ward-level stakeholders, and sectoral line agencies.
- Prepare and submit a final GIS database, updated land use zoning maps, and a comprehensive report.

##### Key Issues

1. **Data Accuracy:** Updates must rely on verified datasets and the approved २०७९ guideline to maintain reliability and consistency.
2. **Compliance:** All updates should comply with the **Land Use Act, २०७६**, the **Land Use Regulation, २०७९**, and GIS standards issued by the Government of Nepal.
3. **GIS-Based Zoning Only:** The assignment will be limited to digital updating of zoning layers. **Parcel-wise cadastral integration** and database generation remain the responsibility of the **Survey Department** after submission of the updated map by the municipality.
4. **Stakeholder Verification:** Active engagement with local stakeholders—including ward-level committees and the municipal land use implementation council—is required to validate and finalize zoning adjustments.





5. **Institutional Roles:** The municipality acts as the lead institution for the update process, while the Survey Department will later provide technical support for parcel-level GIS integration.
6. **Data Ownership and Access:** Respect the custodianship of cadastral data by the Survey Department, ensuring that updated GIS layers are officially recognized and institutionally aligned.

## 5. Methodology

The methodology for this assignment will follow a structured, participatory, and GIS-based approach, ensuring technical accuracy and compliance with national standards.

### 1. Review of Existing Data

- Review base maps provided by the Survey Department, including existing land use zoning maps.
- Study national-level land classification codes and legal provisions under the Land Use Act, 2076 and Regulation, 2079.
- Identify discrepancies, outdated zones, and areas requiring updates.

### 2. Ward-Level Consultation and Data Collection

- Conduct land use discussion workshops for all wards with elected representatives and stakeholders.
- Collect information on current land use, local development priorities, and required zoning changes.
- Document and compile minutes of ward-level discussions.

### 3. Verification of prepared Local Land Classification Framework

- Analyze ward-level inputs and national standards.
- Draft the municipality-specific land use classification guideline (भू-उपयोग क्षेत्र वर्गीकरण सम्बन्धी मापदण्ड तथा आधारहरु).
- Present the draft framework at the municipal level for validation and finalization.

### 4. GIS-Based Land Use Mapping

- Update land use zones digitally using GIS tools (ArcGIS, QGIS).
- Apply standard classification codes, color schemes, and symbology as per national formats and the finalized local framework.

### 5. Data Validation and QA/QC

- Perform internal data quality checks to ensure spatial and attribute-level accuracy.
- Cross-verify updates with field-level inputs and stakeholder feedback.

### 6. Stakeholder Verification and Finalization

- Organize a final presentation at the municipal level to share updated zoning maps and classification.
- Incorporate feedback and finalize maps and datasets.

## 7. Reporting and Submission

- Submit digital GIS data including shapefiles, geodatabases, and KML formats.
- Prepare and hand over ward-wise and municipality-level map books.
- Submit the final technical report outlining methodology, findings, classification framework, and recommendations.

## 6. Qualifications/ Expertise and Financial Budgeting

The budget for this project will be based on the financial proposal submitted by the consultancy firm, covering all costs related to project implementation, including personnel, logistics, and reporting not exceeding **6 Lakhs Nepalese Rupees (Excluding VAT)**. Payment will be made in installments upon the successful completion of key deliverables i.e. **40% after Contract as advance and 60% after final report submission**, as agreed upon in the contract.

The Service provider firm shall divide the total budget as below:

S.N.	Particulars	Unit	Quantity	Rate(NRs.)	Amount NRs.	Qualification
1	Team Leader	Man/Days	30			Masters in Geomatics/Civil/Law
2	GIS Expert	Man/Days	50			BE in Geomatics
3	Surveyor	Man/Days	30			Diploma in Survey/Civil
4	Socio Economist	Man/Days	10			BE Socool/ Economy
5	Data Analyst	Man/Days	50			BE in Data science/Database/ IT
6	Database Engineer	Man/Days	60			BE in Data science/ IT/Geomatics
7	Agriculturist	Man/Days	10			BE in Agriculture
8	Civil Engineer	Man/Days	20			BE in Civil
9	Documentation Officer	Man/Days	30			
10	Vehicles Hire	LS	LS			
11	Survey Equipment hire	LS	1			
12	Database Preparation	LS	1			
13	Workshop	LS	2			

14	Computer/Printer Hire	LS	1			
15	Report Printing	No	3			
16	Map Printing (A1,11 Ward wise and 1 palika)	No	12			
17	Emergency Expences	LS	1			
18	Field Visit	LS	11			
	<b>Sub-Total (A)</b>					
	<b>VAT@13%</b>					
	<b>Total Amount including VAT</b>					



प्रमुख प्रशासकीय अधिकृत

## 7. Outputs and Deliverables

The consultancy firm is expected to deliver the following:

### 1. Updated Land Use Map:

A GIS-based updated land use zoning map of Narayan Municipality, reflecting the current land use scenario and aligned with both the finalized local framework and national standards. This includes classification into all applicable zones as defined by the Land Use Act and Regulation.

### 2. GIS Data Files:

All GIS datasets used and produced during the assignment must be submitted in open, editable formats compatible with standard GIS software (e.g., ESRI Shapefiles, KML, GeoDatabase). This includes:

- Updated zoning layers
- Symbolology and metadata files
- Map layout templates (if applicable)

### 3. Map Books:

A printed and digital **Map Book** containing ward-wise and municipality-level maps (A3 and A1 sizes) showing the updated land use zones clearly, with legends and standardized symbolology.

### 4. Final Technical Report:

A detailed report covering:

- The step-by-step methodology
- Data collection and consultation process
- Challenges and limitations
- Recommendations for future land use planning and coordination with the Survey Department
- Attachments: ward-level consultation minutes, zoning framework, maps, and photos

The report should be submitted in both **hardcopy (2 sets)** and **digital formats**.





*[Signature]*  
प्रमुख प्रशासकीय अधिकृत

## 8. Work Plan and Time Schedule

The total duration for this project is of 3 Months, starting from the day of contract signing. The following work plan outlines the key activities and their respective timelines:

Activities	3 Months
Review of Existing Land Use Data	X
Draft and finalize Zoning criteria	X
GIS-Based Land Use Map Update	X
Data Validation and Quality Assurance	X
Stakeholder Consultation and Verification	X
Final Report Preparation and Submission	X

**Note:** The timeline is flexible and can be adjusted based on mutual agreement.

## 9. Logistic Support

The consultancy firm will be responsible for the overall management of the project, including:

- **Logistics:** Arranging transportation, accommodation, and other logistical needs for the project team.
- **Meetings:** Organizing meetings with stakeholders and ensuring active participation.
- **Data Handling:** Managing, all data handling, processing, and storage to ensure data integrity and security.

## 10. Submission of Proposals

Interested consultancy firms are invited to submit their technical and financial proposals, along with relevant experience and qualifications of the team members, by 22<sup>nd</sup> of Bhadra 2082. Proposals should be submitted to the Office of the Municipal Executive, Narayan Municipality, Dailekh District.