GOVERNMENT OF NEPAL
MINISTRY OF LAND MANAGEMENT, COOPERATIVES AND POVERTY ALLEVIATION

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Short Term Training Syllabus

TABLE OF CONTENTS

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Basic Geographic Information System (GIS) Training

Course Code: STT0401

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This training is one of the short-term refresher training courses designed for the professionals from diverse sector, accustomed with little or no GIS concept. This course offers a comprehensive introduction to Geographic Information Systems (GIS) and spatial data analysis. The curriculum spans theoretical foundations and practical applications. Participants will explore the nature of geographic phenomena, components of GIS, and the evolution of its applications. They will delve into spatial and attribute data, spatial referencing systems, spatial database management, and data entry techniques. The course covers spatial data relationships, topology, and a range of spatial analysis functions. In the supervised lab demonstrations, students will become familiar with GIS software tools, data management, spatial query techniques, and various spatial analysis methods. They will gain hands-on experience in creating databases, digitizing, attribute data editing, thematic visualization, projection transformation, and terrain mapping. The course concludes with a case study and final presentation, allowing participants to apply their skills to real-world scenarios and showcase their proficiency in GIS and spatial data analysis.

Objectives

At the end of this course, participants will be able to:

- Acquire basic knowledge on GIS.
- Understand geographic phenomena and GIS components.
- Analyze spatial data for the purpose of planning and decision making.
- Visualize the analyzed spatial data.
- Gain hands-on skills in GIS Software's, applications and spatial data management.
- Apply GIS techniques to real-world scenarios and present findings.

Target Group:	Employees from Government and Public Sector.
Number of Participants:	20
Approach of Instruction:	Theoretical Lectures. Practical Classes. Case Studies/Project Work.
Duration of Training:	15 Working Days
Sessions per day:	4 (1 hour and 30 minutes each session)
Total Number of Sessions:	60 Sessions

Evaluation Criteria:

Evaluation of Training is conducted based on:

- Project work.
- Final presentation.

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

Part A: Theory: [12 Sessions]

1 The nature of Geographic Phenomenon [1]

1.1 Geographic phenomena

1.2 Geographic fields and objects

2 Concept and introduction to GIS [1]

2.1 Definition of GIS

2.2 Evolution of GIS

2.3 Components of GIS

2.4 Applications of GIS

3 Spatial Data Model [1]

3.1 Vector and Raster Data

3.2 Spatial and Attribute data

4 Spatial referencing [2]

4.1 Projection and Spatial reference systems

4.2 Coordinate System

4.3 Coordinate Transformation

4.4 Geo-referencing

5 Spatial database management [1]

5.1 Introduction

5.2 Data models

5.3 Database design and maintenance

5.4 Storage and security

6 Spatial data entry, preparation, relationship and topology [2]

6.1 Data sources

6.2 Data preparation and input techniques

6.3 Data editing, verification and conversion

6.4 Data Quality

6.5 Relationship and Topology

7 Spatial data analysis [2]

7.1 Vector Data Analysis: Measurement, retrieval and classification functions

7.2 Overlay, neighbourhood, connectivity functions Buffer Analysis, Clip, Merge, Intersection, Union

7.3 Raster Data Analysis: Image statistics, Resolution, Overlay Operation

8 Digital elevation model (DEM) [1]

8.1 Introduction, data collection, processing and creation of DEM

8.2 Storage and presentation

8.3 Hill shade, Viewshed

9 Spatial data visualization [1]

9.1 Map layout and composition

9.2 Map dissemination

Part B: Supervised Lab Demonstrations: [38 Sessions]

10 Familiarize with tools of GIS software [4]

11 Data management and handing spatial and attribute data [2]

12 Defining projection and Geo-referencing, scaling [2]

13 Creating database and digitizing geo-referenced raster data, topology correction [3]

14 Attribute data entry and editing tabular data [2]

15 Spatial and attribute query [2]

16 Spatial analysis: Vector Analysis and Raster Analysis [5]

17 Thematic data application and visualization [5]

18 Projection and transformation from Everest to WGS 84 and vice versa [2]

19 Terrain Mapping (DEM, Hill shades, slope aspect, contours) [2]

20 Map Layout preparation and map printing [4]

21 Working with satellite image, Mobile Application [5]

Part C: Case Study and Final Presentation [10 Sessions]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Advanced Geographic Information System (GIS) Training

Course Code: STT0402

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This training is one of the short-term refresher training courses designed for the professionals from diverse sector, accustomed with basic GIS concept. The training aims to orient participants knowledge from basic towards the advanced applications of geographic information systems and spatial analysis. The training material comprises of theoretical lectures supported by practical exercises on various topics such as advanced vector and raster analysis, projection systems, model building, multi criteria evaluation, network analysis as well as some theme-based application of GIS in watershed analysis, topographic mapping, 3D visualization and flood inundation mapping. The ultimate objective is to empower participants ability to handle various GIS tools for applying different techniques to solve complex real-world problem and ultimately support in well informed decision making. At the end of the training, participants are required to undertake a project work which give them an opportunity to apply the skills learned in the training to solve interesting challenges. Overall, the training expects to broaden trainees' knowledge on advance GIS tools and its application domain.

Objectives

Upon the completion of this course, participants will be able to

- Acquire profound knowledge and understanding of advanced concepts and techniques used in modeling geographic phenomena
- Analyze geospatial data to solve geographic problems for informed decision making
- Able to carry out mainstream GIS applications

Target Group:	Employees from Government and Public Sector
Number of Participants:	20
Approach of Instruction:	Theoretical Lectures
Practical Classes	
Case Studies/Project Work	
Duration of Training:	15 working Days
Sessions per day:	4 (1 hour and 30 minutes each session)
Total Number of Sessions:	60 Sessions

Evaluation Criteria:

Evaluation of Training is conducted based on:

- Project work
- Final presentation.

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

Part A: Theory and Supervised Lab Demonstration [50 Sessions]

1 Basics of Geographic Information System [1]

1.1 Introduction to GIS

1.2 Components of GIS

1.3 Raster and Vector data

2 Topographical Database Preparation [4]

2.1 Database schema

2.2 Scanning, Geo-referencing scanned topographical map

2.3 Digitizing map features, Adding attributes to point, line and polygon features

2.4 Topology and its characteristic in Topographical database, Topological Rule and Editing of spatial data

2.5 Visualization of Topographical Map.

3 Map Projection and coordinate transformation [3]

3.1 Map Projection

3.2 Map coordinate system: Geographic and Projected coordinates

3.3 Coordinate Transformation, Datum transformation,

3.4 Define Projection, set a data frame's map projection, Plotting of GPS data into maps, Projecting the GPS data into the suitable projection system, Coordinate conversion from metric to Decimal degree and vice versa, Changing the data from one datum to another, Overlay of Geo-referenced image over the existing vector data set

4 Vector Data Analysis [4]

4.1 Measurement and classification Analysis

4.2 Neighbourhood Analysis, Overlay Analysis, Connectivity Analysis

4.3 Operations on attributes

4.4 Point measurement (Automatically calculating X and Y coordinates), Line measurement (Automatically calculating lengths), Polygon measurement (Automatically calculating Area and perimeters)

4.5 Geometric and Attribute selection, Spatial query based on the selected features

4.6 Spatial operations (Clip, intersect, union, buffer, reclassification, overlay, geocoding)

5 Raster Data Analysis [2]

5.1 Local operations: Single Raster, Reclassification, Multiple Raster

5.2 Neighbourhood operations

5.3 Zonal operations, Raster Data Extraction.

6 Model Builder and Model Evaluation [2]

6.1 Describe Model Builder and its advantages, Quick tour of Model Builder Interface, Essential Model Builder vocabulary; create a Model for a case in ArcGIS

7 Multi-criteria Evaluation (MCE) using vector/raster model [4]

7.1 Multi-criteria analysis, its applications and users,

7.2 MCE Methods (Boolean and Non-Boolean approach)

8 Watershed Delineation [2]

8.1 Acquire the Digital Elevation Model, Filling in the Pits/Sink filling, Flow direction, Flow accumulation, Stream Network Delineation/ Create a stream network, Edit stream segments, Identify the drainage basins, Creating vector streamline features from a stream raster, Watershed outlet points, Delineating watersheds, Calculating flow length.

9 Surface Creation and Analysis [2]

9.1 Describe surfaces (Contours, Mass points, TINs, Raster), Creating surface using Interpolation techniques, and Terrain analysis tools: Slope, Aspect, Hill shade and Curvature, Visibility tools for Viewshed Analysis: Line of sights, Observer Point identification, Viewshed calculation, Extracting information from a TIN: TIN Aspect, TIN Slope, and TIN contour

10 Network Analysis [2]

10.1 Shortest Path Analysis (Unordered and Ordered)

11 Use and Operation of Open Street Map, Satellite Imagery and Freely available Mobile Application [2]

11.1 Editing and contributing in open street map, Online and offline mapping

11.2 Download Satellite Imagery

11.3 Mobile Application

12 Application of GIS in Disaster Management [12]

12.1 Flood mapping/ Hazard Mapping/ Landslide Mapping/ Change Detection

13 Google Sketch Up, 3D modelling and visualization using Arc Scene [4]

13.1 Install the Google Sketch Up application, 3D Building modelling using Google Sketch Up,

13.2 3D animation using Arc Scene

14 Integrating GIS and Google Earth [2]

14.1 Loading ArcGIS data over Google Earth

14.2 Getting the data traced in Google earth to ArcGIS

15 Web GIS [4]

15.1 Basics of Web Mapping

15.2 Creating Web Map

Part B: Case Study and Final Presentations [10 Sessions]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Basic Remote Sensing Training

Course Code: STT0403

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This is one of the short-term training courses that is developed for the technical employees of Government and Public Sectors. In this course, trainees will explore fundamental concept of remote sensing. During this training, trainees will build upon the foundational concepts of remote sensing, exploring remote sensing techniques, cutting-edge technologies, and real-world applications. The goal of this training is to equip trainees with expertise to tackle challenges of remote sensing , analyze data, and make informed decisions. This training incorporates a wide range of topics including basics of remote sensing, digital image processing, image registration and rectification, image classification, Hyperspectral Imaging, LIDAR, image fusion, DEM and orthophoto generation and applications of remote sensing in geospatial context

Objectives

Upon completion of the course, the participants will be able to:

- Acquire basic knowledge on Remote Sensing.
- Operate Remote Sensing Software
- Handle different satellite image, process image
- Apply Remote Sensing in Geospatial context

Target group: Employees from Government and Public sector.

Approach of Instruction: Lecture, Group Discussion, Project work, indoor practical, Outdoor practical

Number of Participants: 20

Duration of Training: 15 working Days

Sessions per day: 4 (1 hour and 30 minutes each session)

Total Number of Sessions: 60 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Project work
- Final presentation

Attendance Requirement:

at least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance) Course Contents:

Part A: Theory [14 Sessions]

1 Basics of Remote Sensing [1]

1.1 Physics of Remote Sensing, RS data acquisition mechanism, Optical Remote Sensing, Remote Sensing Workflow

2 Image Statistics [1]

2.1 Image and data formats

2.2 Band Combination

3 Sensors and Remote Sensing Satellites [1]

3.1 Platform and sensors of EO satellite system, different types of existing sensors, resolution of a sensor system

4 UAV Photogrammetry [2]

4.1 Flight Planning

4.2 UAV Mapping

5 Digital Image Processing [3]

5.1 Overview of image processing, Image pre-processing (radiometric and geometric corrections), spatial transform (spatial filtering, convolution filters), spectral transformation (contrast enhancement, multispectral ratios)

6 Image Classification [3]

6.1 Elements of image interpretation, classification process of remotely sensed data, feature extraction, training the classifier (unsupervised training, supervised training, accuracy assessment

7 Integration with GIS [1]

7.1 Introduction with GIS, Integration of GIS with Remote Sensing, final map preparation

8 Integration with GNSS [1]

8.1 Introduction of GNSS, Role of GNSS in remote sensing, procedure Applications of GNSS

9 Geospatial Technologies [1]

9.1 Various applications of RS in Geospatial context in Nepal, Case studies in Nepal (Land Use Mapping, Change detection)

Part B: Supervise Lab Demonstrations: [36 Sessions]

10 Overview of RS software and displaying image data [6]

11 Geo-referencing satellite imagery [2]

12 Image Preprocessing: Image sub setting, Pan-sharpening, Image Mosaicking [2]

13 Image Enhancement Techniques: Contrast, Filtering, Band Rationing [2]

14 Unsupervised Classification: Training site and severability analysis, Supervised Classification [4]

15 Accuracy Assessment [2]

16 UAV Mapping: Mapping with GCPs [6]

17 Acquiring Freely available Satellite imagery [2]

18 Thematic Application of Remote Sensing [10]

18.1 Change detection/ Land Use Mapping using Multi-resolution images/ Topographical map update using multi resolution images/ Forest cover mapping/ Glacier inventory mapping and change detection or others.

Part C: Case Study and Final Presentation [10 Sessions]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Advanced Remote Sensing Training

Course Code: STT0404

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This is one of the short-term training courses that is developed for the technical employees of Government as the Refresher Course. In this course, trainees will explore deeper into the field of remote sensing, taking their knowledge and skills to the next level. During this training, trainees will build upon the foundational concepts of remote sensing, exploring advanced techniques, cutting-edge technologies, and real-world applications. The goal of this training is to equip trainees with the expertise to tackle complex remote sensing challenges, analyze data, and make informed decisions. This training incorporates a wide range of topics including basics of remote sensing, digital image processing, image registration and rectification, image classification, Hyperspectral Imaging, LIDAR, principal component analysis, image fusion, machine learning and AI, DEM and orthophoto generation and applications of remote sensing in geospatial context

Objectives

Upon completion of the course, the participants will be able to:

- Acquire the theoretical concepts on remote sensing.
- Learn about the applications of Remote Sensing applications in Nepal.
- Operate remote sensing software
- Integrate the remote sensing with GIS and GNSS.
- Process remote sensing image and produce map and other outputs.
- Apply the Remote sensing technology in different applications.

Target group: Employees from Government and Public sector

Approach of Instruction: Lecture, Group Discussion, Project work, indoor practical, Outdoor practical

Number of Participants: 20

Duration of Training: 15 working Days

Sessions per day: 4 (1 hour and 30 minutes each session)

Total Number of Sessions: 60 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Project Work
- Final Presentation

Attendance Requirement:

at least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance

Course Contents

Part A: Theory: [13 Sessions]

1 Basics of Remote Sensing [1]

1.1 Physics of Remote Sensing
1.2 RS data acquisition mechanism
1.3 Optical RS.

2 Image Statistics [1]

2.1 Image and data formats.
2.2 Band Combination

3 Digital Image Processing [2]

3.1 Overview of image processing
3.2 Image pre-processing (radiometric and geometric corrections)
3.3 Spatial transform (spatial filtering, convolution filters, Fourier transform)
3.4 Spectral transform (contrast enhancement, multispectral ratios, principal component analysis)

4 Image Classification [2]

4.1 Elements of image interpretation
4.2 Classification process of remotely sensed data
4.3 Feature extraction
4.4 Training the classifier (unsupervised training, supervised training, Non-parametric classification (Artificial neural network, support vector machine, random forest), object based), accuracy assessment

5 Integration with GIS & GNSS [2]

5.1 Introduction with GIS & GNSS
5.2 Integration of GIS with Remote Sensing
5.3 Map preparation
5.4 Role of GNSS in remote sensing

6 Application of Advanced Remote Sensing Techniques [2]

6.1 Microwave and LiDAR remote sensing
6.2 Thermal remote sensing
6.3 Hyper-spectral Remote Sensing
6.4 SAR

7 Applications of Geospatial Technologies [2]

7.1 Various applications of RS in Geospatial context in Nepal

7.2 Case studies in Nepal (Land Use Mapping, Biomass Estimation from remote Sensing Imagery, etc.)

8 Information about availability on different RS products and services [1]

Part B: Supervised Lab Demonstrations: [37 Sessions]

9 Overview of RS software and visualization of image data [2]

10 Ground Control Points (GCPs) collection with GPS or DGPS [2]

11 Orthophoto Generation using UAV[4]

12 Image sub setting, Pan-sharpening, Image Mosaicking [2]

13 Image Enhancement Techniques: Contrast, Filtering, Band Rationing [2]

14 Image Rectification and Registration [2]

15 Principal Component Analysis (PCA), Image Fusion [2]

16 Unsupervised Classification: Training site and separability analysis, Supervised Classification, object-based classification [3]

17 Accuracy Assessment [2]

18 Machine learning and Neural Network Classification [2]

19 DEM and Orth photo generation using stereo-satellite images [2]

20 Land Use mapping using Multi-resolution images [3]

21 Study of thermal image, interpretation of various features [1]

22 Working with Google Earth Engine [6]

23 Application of Advanced Remote Sensing Techniques: SAR, LiDAR, Hyperspectral Imagery [2]

Part C: Case Study and Final Presentation [10 Sessions]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

GNSS And UAV Training

Course Code: STT0405

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities. This is one of the short-term training courses that is developed for the technical employees of Government as the Refresher Course.

This course is designed to give participants a foundational understanding of how GNSS and UAV technologies operate, particularly focusing on datums, coordinate systems, and their transformations. It will also delve into various positioning methods, distinguishing between them and guiding when to use each technique. Furthermore, attendees will explore the practical usage of these modern survey tools in comparison to traditional ones, bolstered by hands-on demonstration sessions.

Objectives

Upon completion of the course, the participants will be able to:

- Learn about the Nepalese coordinate system and datum transformation.
- Establish the control points with GNSS solutions
- Apply GNSS and UAV in mapping
- Plan the flight and capture the digital image through UAV
- Process UAV image and produce map and other outputs.

Target group: Employees from Government and Public sector

Approach of Instruction: Lecture, Group Discussion, Project work, indoor practical, Outdoor practical

Number of Participants: 20

Duration of Training: 7 working days

Sessions per day: 4 (1 hour and 30 minutes each session)

Total Number of Sessions: 28 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Training Activities

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance

Course Contents:

Part A: Theory [6 Sessions]

1 GNSS [3]

1.1 GNSS introduction, History of GNSS, Principles of GNSS, Systems of GNSS and their characteristics, Components of GNSS structure of GPS signal

1.2 Structure of GPS signal, codes and carriers, P-code and C/A code, Signal Carriers and their types, GPS signal transmission procedures, Error sources and correction

1.3 Positioning Techniques: Absolute and relative positioning, Static, kinematic positioning, their applications, pros and cons, GNSS Survey field Procedures

2 UAV photogrammetry [3]

2.1 UAV and its types

2.2 UAV flight planning

2.3 UAV regulation and safety precautions

2.4 UAV Image Capture

2.5 UAV image processing

Part B: Supervised Lab Demonstrations [22 sessions]

3 DGPS [11]

3.1 Demonstration of Differential GNSS handling, operation, software installation and sample data processing [3]

3.2 Differential GNSS field data collection [4]

3.3 Differential GNSS post processing (standalone), post processing, download and conversion of CORS data from online sources, post processing using CORS data) [4]

4 UAV [11]

4.1 UAV handling, demonstration, software installation [4]

4.2 UAV flight and data acquisition [3]

4.3 UAV image processing and output generation [4]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Digital Cadastral Survey and Office Management Training (In-service Training for Amin and Surveyors)

Course Code: STT0406

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities.

This is a short-term training which aims to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities. This training course is developed for the non-gazette I and II class employees of Nepal Engineering Service, Survey Group or equivalent as an In-Service Training. The training primarily focuses on the emerging trends in the field of Cadastre and land management together with the dimensions of general administration for the office management. The participants are provided with the underlying principles, theories in the related field together with practical classes field works and case studies which will enable to broaden the knowledge of the participants.

Objectives

Upon the completion of course, participants will be able to:

- Acquire basic knowledge on Cadastral survey, GIS and Database Management System
- Handle cadastral application software
- Deliver cadastral services effectively in digital environment
- Acquire knowledge for effective office management and support good governance
- Acquire basic knowledge of office Behavior.

Target group: Permanent employees of Nepal Government in Nepal Engineering Service Survey Group with Non-gazette first or second class or equivalent.

Approach of Instruction: Lecture, indoor Practical, Outdoor Practical, Field Visit, Case Studies/Project Work

Number of Participants: 20

Course Duration: 30 Working Days

Total Number of Session: 90 Sessions

Attendance Requirement:

At least 86 sessions out of 90 sessions. (No certificate will be issued to the participant having less than 95% attendance)

Evaluation Criteria:

Evaluation of the training is conducted based on final examination which will be carried out at the end of the course. Final examination consists of 60 marks written examination and 40 marks project work with final presentation.

Grading Criteria:

The certificate is awarded for successful candidate securing minimum 45% marks. The grading system consists of division as below:

- Third Division: 45% -55%
- Second Division: 55%-65%
- First Division: 65% or greater

Course Contents:

Module I: Geomatics [47 Sessions]

1 Introduction [2]

1.1 Introduction to cadastral survey, History of cadastral survey in Nepal,

1.2 Cadastral survey methods, types of cadastres, digital cadastre, importance of digital cadastre, present situation of digital cadastre in Nepal,

1.3 Cadastre vision in international context.

2 Process of Digital Cadastral Survey: [18]

2.1 Total Station basic concept: Introduction, construction and parts, advantages of using total station, working principle, field procedure, temporary adjustment and permanent adjustment, instrument configuration, data acquisition, Data formats and transfer methods

2.2 Control Survey: Introduction to control points, concept of linear and angular accuracy, adjustment, methods of control point establishment (traversing, triangulation, trilateration, GNSS); Planning, Recce, Monumentation, observation and coordinate computation.

2.3 Detail Survey

2.3.1 Planning and preparation, Attribute data and spatial data capturing and sketch preparation, data entry, Data download and mapping, report printing (Notice, field book, ownership certificate), map printing.

3 Map projection system and Coordinate Transformation [5]

3.1 Introduction of map projection,

3.2 Types of map projection,

3.3 Projection used in Nepal, parameters of map projection used in Nepal, sheet numbering system of cadastral survey, coordinate system used in Nepal, coordinate calculation of cadastral map sheet corner.

3.4 Coordinate transformation in GIS.

4 Computer and Database Concept [2]

4.1 Data base concept, Database and Geo-database, database handling software, database management system, and Importance of Database management system over file system, relational database.

5 Geographic Information System [2]

5.1 Introduction to GIS, Components, application area, GIS software, spatial and attribute data, vector

and raster representation of spatial data

6 Land Information system (LIS) [2]

6.1 Concept of LIS, component of LIS, stakeholder of LIS, importance of LIS, LIS in the context of Nepal, NeLIS, MeroKitta, LRIMS, PAM.

7 Photogrammetry and Remote Sensing [2]

7.1 Basic Concept of Photogrammetry

7.2 Fundamental of Remote Sensing

8 Digitization of paper based cadastral maps [12]

8.1 Scanner, types of scanners, map scanning process, scanning file management and format, method of map digitization, digitizing technique, software used for map digitization, accuracy assessment of digitized data and present situation of digital cadastral data. Practical: Scanning, digiting, layout and map printing

9 Basic concept of Land Administration and management [2]

9.1 Definition of land, land-human kind relationship, land tenure, land administration, characteristics of good land administration, land registration, types of land registration, characteristics of land registration system of Nepal, process of land registration in Nepal, land tenure system, land ownership and different interests in land, international perspective (trend) in land administration, fit for purpose in land administration.

Module II: Office Management [23 Sessions]

10 Public Administration and Management [2]

10.1 Fundamental of public administration
10.1.1 Definition, characteristics and Emerging trends,

10.2 Different aspects of management
10.2.1 Planning, Organization, Staffing, Directing, Co-ordinating, Reporting, Budgeting, Motivation, Leadership, Decision making process, Supervision, Monitoring and evaluation etc.

11 Good Governance [1]

11.1 Introduction, Principle of Good Governance, role of land administration in good governance, provision and situation in Nepal.

12 Positive attitude, Behaviour changes and public relation [2]

12.1 Attitude and Behaviour Change, Gender Responsive, Behaviour, Grievance handling, Professional ethics and code of conduct of surveyor.

13 Project management [1]

13.1 Concept of project, project cycle, survey project management,

14 कार्यलय संचालन र आधारभुत सीप [4]

14.1 कागजात व्यवस्थापन

14.2 टिप्पणी लेखन

14.3 पत्र दर्ता तथा चलानी,

14.4 फिल्ड प्रतिवेदन

14.5 नक्सा, श्रेस्ता, फिल्डवुक व्यवस्थापन,

14.6 डिजिटल डाटाको व्यवस्थापन

14.7 कार्यालय सरसफाइ, अदालत तथा संवैधानिक निकायलाई दिइने जवाफ लेखन

14.8 लेखा, स्टोर, प्रशासन, प्रविधी

15 Accounting Management [2]

15.1 Introduction, types and present government accounting system in Nepal, सार्वजनिक खरिद ऐन, आर्थिक कार्यविधि सम्बन्धी ऐनका आधारभूत पक्षहरु. खरिद प्रकृया, वेरुजु, भौचर

16 Constitution of Nepal [2]

16.1 नेपालको संविधानमा रहेका मौलिक हक तथा भूमि संग सम्बन्धित व्यवस्था

17 Law [3]

17.1 भूउयोग ऐन, जग्गा नापजाँच ऐन, भूमि सम्बन्धी ऐन, देवानी संहिता 2074 (जग्गा प्रशासन सम्बन्धी व्यवस्थाहरु), मालपोतऐन, २०३४ तथा नियमावलीमा समावेस भएका नाप नक्सा सम्बन्धी व्यवस्थाहरु, निजामती सेवा ऐन २०४९, तथा निजामती सेवा नियमावली २०५०का मुलभुत विशेषताहरु

18 Right to Information [2]

18.1 Introduction, provision and liability of Public Office, methods for providing information, right to information related acts.

19 Time and Stress Management [2]

20 Meditation and Yoga [2]

Module III: Field visit and project work [20]

Trainee has to complete a final project work on cadastral data preparation. The project work presentation and submission of project report is compulsory for completion of training. Project report shall also be scored for final evaluation.

21 Case Study and Group Discussion [10]

22 Community Engagement [10]

22.1 Importance, Scope, Problem and Challenge in the Sector of Land Management from Community perspective (Visiting local community making audio video and response)

22.2 Visualizing the service delivery from Peoples Eye

22.3 Solution with Recommendation and Conclusion

Government of Nepal
Ministry of Land Management, Cooperatives and Poverty Alleviation
LAND MANAGEMENT TRAINING CENTER
Dhulikhel, Kavre

Professional Course on Geomatics and Land Administration (In-service Training for Survey Officers)

Course Code: STT0407

Introduction

Land Management Training Centre (LMTC), under the Ministry of Land Management, Cooperatives and Poverty Alleviation, Government of Nepal, is entrusted with the responsibility of conducting short-term and long-term professional training programs in the areas of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other key functions. These training programs are designed to enhance the capacity and competency of employees from government and public sector organizations, enabling them to perform their duties more effectively.

This particular course is designed to support the professional development of Survey Officers, equipping them with essential knowledge and skills relevant to their field. The course includes fundamental concepts of office management, aimed at improving participants' capacity for efficient and effective public service delivery. In addition, the course emphasizes the use of modern geoinformation techniques and provides an overview of the current land administration system of Nepal. Relevant land-related laws, policies, and legal frameworks will also be discussed in detail. Upon completion of this course, participants will gain enhanced knowledge and practical understanding of land administration and management, contributing to their professional growth and improved service delivery.

Objectives:

Upon completion of the course, the participants will be able to

- Acquire managerial skills for office management
- Develop essential managerial and administrative skills for effective office management
- Utilize digital technology to efficiently carry out daily office tasks
- Demonstrate knowledge and skills for delivering effective and citizen-friendly public services
- Apply modern geo-information techniques in their professional responsibilities
- Understand and interpret the current cadastral system, land administration practices, and relevant legal frameworks in Nepal

Target Group: Gazette officer of Government of Nepal Engineering service, Survey group having permanent service of at least two years

Mode of Instruction: Lecture, Indoor practical, Case Studies/Project Work

Number of Participants: 20

Course Duration: 30 working days

Sessions per day: 3 (1 hour and 30 minutes each session)

Working Days: 90 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on: Final examination will be carried out at the end of the course. Final examination consists of 60 marks written examination and 40 marks project work with final presentation.

Attendance Requirement:

At least 86 sessions of total 90 sessions (No certificate will be issued to the participants having less than 95% attendance).

Grading Criteria:

The certificate is awarded for successful candidate securing minimum 45% marks. The grading system consists of division as below:

- Third Division: 45% -55%
- Second Division: 55%-65%
- First Division: 65% or greater

Course Contents

Module I –Geomatics and Land Administration [36 sessions]

1 Introduction to Geomatics [6]

1.1 International Boundary Survey: Concepts, Principles and Existing Situation
1.2 Modern trend on Land administration systems, Concept of Spatial Data Infrastructure
1.3 Concept of LIS & present situation of LIS in Nepal
1.4 3D Cadastre
1.5 Public private partnerships & private agencies' involvement in Surveying & mapping in Nepal
1.6 National and International surveying mapping organizations

2 Land Administration organizations [3]

2.1 Ministry of Land Management, cooperatives and poverty Alleviation organization Structure (Including Departments)
2.2 Land Management Training Centre
2.3 Trust Corporation
2.4 Department of Mines & Geology
2.5 Department of Urban planning & Building construction
2.6 Land Revenue and Land Reform office
2.7 Survey offices (mapping and updating section)
2.8 Development Authority and local bodies
2.9 Different land related commissions, authorities & committees

3 Law, Land related Laws& Policies [15]

3.1 Basic concept of Law
3.2 Law making process
3.3 Constitution of Nepal (Land related issues)

3.4 Land (survey & measurement) act 2019

3.5 Land (survey & measurement) regulation 2058

3.6 Land Revenue act 2034

3.7 Land Revenue regulation 2036

3.8 Land related act & regulation 2021

3.9 Trust corporation act 2033

3.10 Land use policy 2072, Land Use Act, 2075 (Overview)

3.11 Land use Regulation 2079

3.12 National Land Policy, 2015

3.13 देवानीसंहिता २०७५ land related cases)

3.14 नाप नक्सा तथा श्रेष्ता अद्यावधिक सम्बन्धी निर्देशिका २०७३

3.15 गाउँ ब्लक क्षेत्रको नापजाँच सम्बन्धी निर्देशिका २०७७

3.16 डिजिटल डाटाको वितरण, प्रयोग र नियम निर्देशिका २०६९

3.17 Land acquisition act 2034

3.18 Other land related act, regulation and directives

4 Survey Office Working Procedure [6]

4.1 Citizen Charter of Survey Offices, Notifications, Cooperating team, Adjudication, Survey &mapping, Sketch Preparation, Preparation of map & database, Fieldbook, Land owner record & certificate preparation, Land Disputes and Rectifications, Land owner certificate distribution & handover, गाँउब्लक नापी फाँट विभाजन, कित्ताकाटआदेश र कित्ताकाट, Field book, Plot register, Map print/trace, कित्ता एकिकरण, फिल्ड रेखांकन, हालसाविक, Minimum breadth &area of parcel, प्लटमिलान,Token number, रुजु र प्रमाणित, फिरादपत्र र प्रतिउत्तर, तेरो मेरो विवाद समाधान ,दुरी प्रमाणित, Tile Check

5 Land Revenue and Land Reform working Procedure [5]

5.1 Citizen Charter of Land Revenue and Land Reform offices, भू-सेवा केन्द्रहरुLand Registration Process, मोठ तथा तामेलि व्यवस्थापन, नामसारी, दाखिलखारेज, संसोधान, जग्गा दर्ता सम्बन्धी व्यवस्था, साविकलगतहरु, किर्ते र जालसाजी, गुठी जग्गा किसिम, गुठी जग्गाको प्रशासन, भुमिसुधार (हदवन्दि, जग्गाधनी मोही वीच जगगा बाँडफाड, राजस्व र धरौटी, रोटी, पजीगत लाभकर सम्बन्धी व्यवस्था, सरकारी र सार्वजनिक जगगाको संरक्षण र व्यवस्थापन।

6 कार्यालयमा कायम गर्नुपर्ने नैतिक मूल्य, मान्यताहरु

Module II- Administration and Management [32 sessions]

7 Introduction [9]

7.1 Public Administration & Management

7.2 Gender Responsive Public service delivery & transparency

7.3 Leadership

7.4 Coordination
7.5 Motivation
7.6 Decision making process
7.7 Conflict management
7.8 Stress management
7.9 Time management
7.10 Change management
7.11 DRR (Disaster Risk Reduction)
7.12 Good governance in Land Administration
7.13 Federalism &Constitution of Nepal
7.14 Right to information & duties of public agencies
7.15 Human resources management
7.16 Budgetary system of Nepal

8 Positive Attitude and Behaviour Change [6]

8.1 Ethics & Professionalism (Code of Conduct of surveyor)
8.2 Monitoring and Supervision
8.3 Organizational Behaviour Culture
8.4 Motivational Skills

9 Office Management [9]

9.1 Hierarchy of staff
9.2 Financial management in office (process of expenditure, various tax)
9.3 Store Management
9.4 Duty & accountability of staff
9.5 Procurement procedure
9.6 Letter writing skill
9.7 Report writing skill
9.8 Responding the letters from over sighting agencies
9.9 Progress report preparation
9.10 Presentation skills
9.11 Meeting management
9.12 Grievance management
9.13 Public Hearing
9.14 Inter Organizational coordination

10 ICT- In Land Administration [6]

10.1 Use of ICT in service delivery
10.2 Computer Networking concepts
10.3 Clint Server based service delivery
10.4 Database Management
10.5 Data Security and Sharing mechanism

10.6 Basic programming concept and application development

Module III- Study Visit and Project work [22]

11 Study visit [8 session]

12 Community Engagement [10]

12.1 Importance, Scope, Problem and Challenge in the Sector of Land Management from Community perspective (Visiting local community making audio video and response)

12.2 Visualizing the service delivery from Peoples Eye

12.3 Solution with Recommendation and Conclusion

13 Project work and case studies [4 session]

Government of Nepal

Ministry of Land anagement, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Orientation Training for Newly Recruited Survey Officers

(Pre-Service Training for Survey Officers) Course Code: STT0408

Introduction

The Land Management Training Centre (LMTC), operating under the Ministry of Land Management, Cooperatives and Poverty Alleviation, Government of Nepal, is mandated to conduct both short-term and long-term professional training programs in the fields of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. The short-term training programs specifically aim to enhance the capacity of employees from government and public sector organizations by equipping them with the necessary skills and knowledge relevant to their respective roles.

This particular short-term course is developed as a Pre-service Training program for newly recruited Survey Officers of the Government of Nepal. The training is designed to prepare new officers with the competencies required to deliver public services professionally, efficiently, and in compliance with applicable legal standards. It covers a wide range of topics including office management, financial administration, and other operational areas. In addition to fostering professional growth, the course emphasizes personal development to ensure that officers are fully prepared to serve as capable and responsible employees of the Government of Nepal. Furthermore, the training provides clarity on the specific roles and duties participants will undertake in various organizations where they may be assigned.

Objectives

Upon completion of this course, participants will be able to;

- Acquire foundational management skills along with competencies in professional and personal development
- Understand and define their roles and responsibilities across various capacities and organizations
- Apply their academic knowledge effectively in real-world professional settings
- Prepare themselves to become competent and responsible employees of the Government of Nepal

Target group:	Newly recruited Survey Officers (Gazetted Class III Level)
Number of Participants:	Flexible (based on the number of newly recruited Survey Officers)
Approach of Instruction:	Lecture, Group Discussion, In-door practical, Out-door practical Project work, Field visit
Duration of Training:	3 Months (adjustable in given circumstances)
Sessions per day:	4 Sessions (1 hour and 30 minutes each session)
Total Number of Sessions:	256 Sessions (adjustable in given circumstances)

Evaluation Criteria:

Evaluation of the training is conducted based on:
Final examination will be carried out at the end of the course. Final examination consists of 60 marks written examination and 40 marks project work with final presentation.

- Case Study
- Project work
- Presentation
- Home assignment

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Contents

Module I: Management Skills [66 Sessions]

1 Basic Skills [33]

1.1 Application writing [2]
1.2 Letter writing for official correspondence [2]
1.3 प्रतिवेदन लेखन [2]
1.4 टिप्पणी लेखन [2]
1.5 Presentation Skills [2]
1.6 Public Speaking Skills [2]
1.7 Speech Writing [2]
1.8 Event Organizing [1]
1.9 Personality Development [2]
1.10 Dinning Etiquettes and Dress Code [2]
1.11 Negotiation Skills [1]
1.12 Professional Ethics and Code of Conduct [2]
1.13 Organizational Behaviour and Culture [1]
1.14 Positive Attitude & Behaviour Change [2]
1.15 Interpersonal Relationship Building [2]
1.16 Conflict Management [2]
1.17 Stress Management [2]
1.18 As requested by the participants [2]

2 Office Management Skills [20]

2.1 Understanding the organogram of the organization and hierarchy of staff including roles and responsibilities, and functions including Ministry, Departments, Divisions, other organizations/ projects, among others [5]
2.2 Store Management [2]
2.3 Planning, budgeting and progress reporting [2]
2.4 Safety: Personnel, Instruments, Data/Documents [2]

2.5 Responding oversight agencies including CIAA, राष्ट्रिय सतर्कता केन्द्र आदि [2]

2.6 Relationship building with other government offices such as District Administration Office, Land Revenue Office, कोष तथा लेखा नियन्त्रकको कार्यालय आदि [2]

2.7 अदालतको प्रतिउत्तर लेखन [2]

2.8 सुचनाको हक [1]

2.9 As requested by the participants (2)

3 Financial Management Skills [13]

3.1 Roles and responsibilities in financial management as the head of an organization [1]

3.2 Different Information Systems being used in Financial Management including LMBIS, CGAS, etc. [2]

3.3 भ्रमण खर्च नियमावली, आर्थिक कार्यविधि ऐन, २०६४, सार्वजनिक खरिद ऐन तथा नियमावली [2]

3.4 बेरुजु, संपरिक्षण, प्रगति प्रतिवेदन [1]

3.5 खर्चको फांटवारी, राजस्वको मास्केवारी, गोध्वारा भौचर [2]

3.6 Preparation of TOR, Technical specification, Cost Estimation, Quotation/Bidding Document preparation and Invitation of Bids [3]

3.7 Evaluation of Bid Documents [1]

3.8 PDI (Post-delivery Inspection) [1]

Module II Basic Skills of Service Delivery in the Professional Domain [128 Sessions]

Part A: Surveying, Mapping [40 Sessions]

4 Instrument handling and data processing [8 working days]

4.1 Instruments used for field data acquisition [5]

4.2 Software used for data processing [5]

4.3 Field survey methods [Practical:30]

Part B: Land Administration [88 Sessions]

5 Innovations in the field of surveying and mapping [5]

5.1 Introduction, Concepts and principles [1]

5.2 Historical Overview of Nepal-India and Nepal-China Boundary [2]

5.3 Technical issues in international boundary and role of Survey Officer [2]

6 Review of the Cadastral Surveying and Land Administration System and procedures of Nepal, prevailing challenges and way forward [35]

6.1 Cadastral surveying procedures [2]

6.2 Service Delivery from Survey Office [2]

6.3 Service Delivery from Land Revenue Office [2]

6.4 Land Information System in Land Revenue Office including LRIMS, PAM, etc. [2]

6.5 Land Information Systems in Survey Office including NeLIS, Merokitta, SaEx, Parcel editor, etc. [8]

6.6 Digital Updating of land records [2]

6.7 Archiving and protection of land records [2]

6.8 Enhancing effectiveness of Service Delivery from Survey Office [2]

6.9 Citizen Charter and its effectiveness [1]

6.10 लगत कट्टा [2]

6.11 फिल्ड रेखांकन अभ्यास [4]

6.12 सर्जमीन मुचुल्का [3]

6.13 As requested by the participants [3]

7 Review of Geodetic Surveying activities in Survey Department, their challenges and way forward [3]

8 Review of Topographic Surveying activities in Survey Department, their challenges and way forward [3]

9 Review of National Spatial Data Infrastructure in Survey Department and other organisation, their challenges and way forward [2]

10 Review of Land Reform initiatives in Nepal, ongoing activities and challenges [3]

11 Role of Survey Officer in Different Capacity [4]

11.1 As the head of Survey Office

11.2 As an officer at Survey Office led by higher level officer

11.3 As an officer under the ministry / Departments/ Divisions/ Sections / units

11.4 As an instructor

11.5 As an officer at oversight agency

11.6 In other organizations/projects where a survey officer can be placed for work

12 Survey Project (Cadastral, Geodetic, topographic etc.) Management [3]

13 Public-public and public-private partnerships in Surveying & mapping in Nepal [2]

14 Engagement with National and International Professional Organisations [2]

15 Land related policies, laws, directives (निर्देशिका), guidelines (कार्यविधि), SOP [21]

15.1 नेपालको संविधान [1]

15.2 भूउपयोग नीति, २०७२ र राष्ट्रिय भूमि नीति, २०७५ [1]

15.3 जग्गा (नापजाँच) ऐन, २०१९ र नियमावली, २०५८ [4]

15.4 मालपोत ऐन, २०३४ र नियमावली, २०३६ [2]

15.5 मुलुकी देवानी संहिता, २०७४ र कार्यविधि, २०७४ [2]

15.6 भूउपयोग ऐन, २०७६ र नियमावली, २०७९ [1]

15.7 नापनक्सा तथा श्रेष्ता अद्यावधिक सम्बन्धी निर्देशिका २०७३ [1]

15.8 जग्गा प्रशासन सम्बन्धी कार्यविधि/निर्देशिका [2]

15.9 Directives, circulars and instructions issued, time-to-time, by the Ministry of Land Management, Cooperatives and Poverty Alleviation, Survey Department, and Department of Land Management and Archive including सरकारी जग्गा लीजमा दिने सम्बन्धी कार्यनीति, २०७९, सार्वजनिक प्रकृतिको

जग्गा प्रयोग गर्न उपलब्ध गराउने सम्बन्धी मापदण्ड, २०७७, हदबन्दी भन्दा बढ़ी जग्गा उपयोग गर्न दिने सम्बन्धी आदेश, २०७८, etc. [3]

15.10 Protection of Government and Public Land; Roles and Responsibilities [2]

15.11 Management of Trust Lands [2]

16 Basic understanding of the terminologies frequently used in land administration services [5]

16.1 सभे फाराम नं. १ देखि ५ सम्म (Field Book, तेरीज, श्रेस्ता, पूर्जा, क्षेत्रफलको हिसाब), Cadastral Map, लूजसीट, Plot Register, Parcel Plan/Map, Trace Map, Mounting Paper, Cloth Map, Blue Print, s-embrace, टायल चेक, कित्तकाट, लगतकट्टा, प्लटमिलान, किसिम परिवर्तन, दूरी प्रमाणित, घरवाटो प्रमाणित, हालसाविक, दूरी अंकित, खण्डीकरण, कित्ता एकीकरण, विरह, चौहद्दी, सर्पट नापी, पुनःनापी, गाउँब्लक नापी, जिरायत जग्गा, गुठी जग्गा र प्रकार, विर्ता जग्गा, उखडा जग्गा, बहाल विटौरी जग्गा, लिखत, नामसारी, दर्ताफारि, मोही बाँडफाँड, अंश भरपाइ, अंश बण्डा, दाखिल खारेज, राजिनामा, मोठ, रजिट्रेसन, दर्ता, रोक्का फुकुवा, पूँजिगत लाभकर, रजिष्ट्रेसन शूल्क, मालपोत, एकीकृत सम्पत्ति कर, थैली अंक, साविक लगत, हालैदेखिको बकस, शेष पछ्ि◌को बकस, बेजिल्ला पास, दृष्टि बन्धक, डोर पास, भोग बन्धकि, अनुसूची-२ मोहीको लगत, अनुसूची-३ मोही प्रमाण पत्र, अनुसूची-४ जोताहाको निस्सा, ७ नं. फाँटवारी, २ नं. रसीद, हकसफा, मौजा, फिल्ड सर्जमीन मुचुल्का, आकाशे कित्ता, जालसाजी, किर्ते, आदि।

Module III- Study Visit and Project work [62 Sessions]

17 Study Visit (Maximum working 10 days)

17.1 Field Visit as allocated by the Training Coordinator

17.2 Report writing

17.3 Presentation

18 Capstone Project [Continued over the period]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Orientation Training on Land Administration and Management (Officer Level)

Course Code: STT0409

Introduction

The Land Management Training Centre (LMTC), under the Ministry of Land Management, Cooperatives and Poverty Alleviation, Government of Nepal, is mandated to conduct short- and long-term professional training programs in the areas of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. These training programs, particularly short-term courses, are designed to enhance the knowledge and capacity of government employees and personnel from public sector organizations, enabling them to perform their duties more efficiently and effectively.

This training is one such short-term program developed specifically for newly recruited or newly deputed Land Revenue Officers of the Government of Nepal. The course introduces participants to the fundamentals of land administration and provides a comprehensive understanding of the current land administration services within the framework of the organizational structure. It also focuses on the working relationship and coordination between survey offices and land revenue offices to ensure efficient service delivery.

Furthermore, the course covers the management of government, public, and private land records, introduces key software systems such as LRIMS and PAMS, and familiarizes participants with the legal framework governing land administration. It also addresses common challenges encountered in service delivery and provides practical knowledge of relevant acts, rules, regulations, directives, and operational procedures essential for land revenue officers.

Objectives

Upon completion of this course, participants will be able to;

- Acquire knowledge on various aspects of the land administration system in Nepal
- Understand the organizational structure and roles of Survey and Land Revenue Offices
- Interpret and apply key legal provisions, rules, and procedures related to land management
- Use digital land administration systems such as LRIMS and Public Access Module (PAMS)
- Manage and update government, public, and private land records effectively
- Identify common issues and irregularities in land administration and suggest practical solutions
- Gain exposure to international trends in land administration and relate them to Nepal's context

Target group:	Newly Posted Revenue Officers (Gazetted Class III, Non-Gazetted Class II Level)
Number of Participants:	Flexible (based on the number of newly recruited or deputed Officers)
Approach of Instruction:	Lecture, Group Discussion, Out-door practical, Project work, Field visit
Duration of Training:	1 week
Sessions per day:	4 Sessions (1 hour and 30 minutes each session)
Total Number of Sessions:	24 sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Project work
- Presentation
- Case Study

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Contents

1 नेपालमा जग्गा प्रशासनका आधारहरू [2]

1.1 नेपालको सन्दर्भमा जग्गा प्रशासनको महत्व र आधारभूत अवधारणा

2 नेपालमा भूमिव्यवस्थापन तथा जग्गा प्रशासनको सांगठनिक स्वरूप र कार्यहरू [4]

2.1 नापी कार्यालय र मालपोत कार्यालयको कार्यक्षेत्र,जग्गा प्रशासन सम्बन्धी प्रमुख कार्यप्रणालीहरू,मोठ तथा श्रेष्ता व्यवस्थापन र तामेली व्यवस्थापन,रजिष्ट्रेशन कार्यप्रणाली, दाखिला खारेज र जग्गा दर्तासम्बन्धी व्यवस्था, सार्वजनिक जग्गाको लगत, संरक्षण र व्यवस्थापन, घर-जग्गा रोक्का तथा फुकुवासम्बन्धी व्यवस्था

3 नाप-नक्शासम्बन्धी सामान्य जानकारी [2]

3.1 नक्साको अवधारणा र मापनाप (Map Scale)

4 जग्गा व्यवस्थापनसम्बन्धी कानुनी व्यवस्था तथा प्रशासनिक प्रक्रिया [4]

4.1 **गुठी जग्गाको प्रशासन,** मुद्दा व्यवस्थापन, जग्गाको हदबन्दी तथा मोहियानी हक, पुनः नापजाँच पछिको श्रेष्ता अद्यावधिक तथा हालसाबिक प्रक्रिया, रजिष्ट्रेशन प्रयोजनको लागि न्यूनतम मूल्याङ्कन, पूँजिगत लाभकर व्यवस्था, कृषियोग्य जग्गाको खण्डिकरण नियन्त्रणसम्बन्धी निर्देशन

5 पूर्वाधारयुक्त मालपोत कार्यालयको अवधारणा तथा कार्यप्रणाली [4]

5.1 LRIMS मार्फत जग्गा प्रशासन, Public Access Module सम्बन्धी व्यवस्था

6 जग्गा प्रशासनमा देखिने अनियमितताहरू, समाधानका उपायहरू तथा नियमनकारी निकायको भूमिकामा सहकार्य [2]

7 जग्गा प्रशासनसम्बन्धी कानुनी व्यवस्थाहरू [4]

7.1 जग्गा प्रशासन निर्देशिका २०५८, देवानी संहितामा भएका परिमार्जित व्यवस्था, मालपोत ऐन २०३४ तथा नियमावली २०३६, भूमि प्रशासन निर्देशिका २०८१, अन्य सम्बन्धित कानुनी व्यवस्था

8 International Trend in Land Administration [2]

8.1 अन्तर्राष्ट्रिय जग्गा प्रशासन प्रणालीका प्रवृत्तिहरू, नेपालको सन्दर्भमा सिकाइ र अभ्यास

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Instrument Handling Training

Course Code: STT0411

Introduction

Land Management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty the Land Management Training Centre, operating under the Ministry of Land Management, Cooperatives and Poverty Alleviation, Government of Nepal, is responsible for conducting both short- and long-term professional training programs in the fields of Surveying and Mapping (Geomatics), Land Administration, and Land Management. Primarily, short-term trainings are designed to enhance the capacity of government and public sector employees in their respective areas of responsibility.

This particular course focuses on the handling of various surveying instruments and serves as a refresher training for technical staff working in Survey Offices and Local Level Governments. It is tailored for employees from district survey offices and local-level surveying personnel, aiming to improve their skills in both modern and traditional surveying tools, with special emphasis on field demarcation techniques. The curriculum covers the entire workflow, from field data collection to processing and plotting survey data using GIS software for comprehensive analysis. In addition, participants will acquire basic knowledge of administrative procedures relevant to effective office management.

Objectives

Upon completion of this course, participants will be able to;

- Conduct traverse using total station instruments
- Compute traverse manually and with help of computer using spreadsheet
- Conduct digital cadastral survey using total station
- Plot and process acquired data within GIS software
- Gain practical knowledge of field demarcation techniques
- Understand basic administrative principles related to office management

Target group:	Local level, non-gazetted fresh employees of Survey Department
Number of Participants:	20
Approach of Instruction:	Lecture, Group Discussion
Duration of Training:	2 weeks
Sessions per day:	4 Sessions (1 hour and 30 minutes each session)
Total Number of Sessions:	48 sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Project work
- Presentation
- Attendance

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Contents

Part A: Technical Section [10 days]

1 Field work [7]

1.1 Instrument Calibration

1.2 Instrument handling: Theodolite, Total station

1.3 Traversing for Control Point Establishment

1.4 Data capturing/ Detailing

1.5 Field survey with Digital Level

1.6 Standard Operation Procedure (SOP)

2 Office work [5 days]

2.1 Computation of Traverse with manual and computer-based method

2.2 Computation of Levelling

3 Basic GIS for spatial data handling

3.1.1 Introduction to GIS software and concept on data preparation
3.1.2 Spatial data management (geo-database, Projection and transformation)
3.1.3 Basic query
3.1.4 Data entry manipulation and table management
3.1.5 Working with point data (making map real work)
3.1.6 Record management
3.1.7 Map layout and printing

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

भूउपयोग तथा जग्गा प्रशासन सम्बन्धी अभिमुखीकरण तालीम (स्थानीय तहका लागि)

Course Code: STT0412

Introduction

भूमि व्यवस्थापन प्रशिक्षण केन्द्रले विगतदेखि नै नाप नक्सा तथा जग्गा प्रशासन सम्बन्धी विविध तालिमहरू संचालन गर्दै आएको छ। मुलुकको शासन प्रणाली केन्द्रीकृत स्वरुपबाट संघीय संरचनामा रुपान्तरण भएपछि भूउपयोग तथा जग्गा प्रशासनको जिम्मेवारीमा स्थानीय तहको समेत सक्रिय सहभागिता सुनिश्चित गरिएको छ, जसको व्यवस्था नेपालको संविधानले गरेको छ। यसै परिप्रेक्ष्यमा, स्थानीय तहमा कार्यरत कर्मचारीहरूलाई भूउपयोग तथा जग्गा प्रशासनसम्बन्धी कार्य स्थानीय तहबाट नै प्रभावकारी रूपमा संचालन गर्न सक्षम बनाउने उद्देश्यका साथ यो तालिमको पाठ्यक्रम तयार गरिएको हो। दुई हप्ते तालिम कार्यक्रम अन्तर्गत, जग्गा प्रशासनको महत्व, भू-तथ्याङ्क प्रणाली (Spatial Data Infrastructure) को स्थापना, भूउपयोग योजना तथा व्यवस्थापनको आवश्यकता र वर्तमान कानूनी संरचना लगायतका विषयहरू समेटिएका छन्।

Objectives

Upon completion of this course, participants will be able to;

- Gain both theoretical and practical knowledge of land use and land administration.
- Understand the principles, processes, and legal frameworks related to land management at the local level.
- Apply the acquired knowledge and skills effectively in their day-to-day responsibilities as newly recruited survey technicians at the local level.
- Use basic GIS tools and techniques for handling, analyzing, and presenting land use and land administration data.

Target group:	Newly recruited (Amin/Surveyor/survey officer) of local level
Number of Participants:	20 (Flexible)
Approach of Instruction:	Lecture, Group Discussion, Outdoor and Indoor field work
Duration of Training:	2 weeks
Sessions per day:	4 Sessions (1 hour and 30 minutes each session)
Total Number of Sessions:	48 sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Project work
- Presentation

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Contents

Part A: Theory [28 Sessions]

1 Introduction [6]

1.1 कित्तानापी परिचय, कित्तनापी नक्साको महत्व र प्रयोग, जमीनमा कित्ता पहिचान र कित्ता रेखाङ्कन गर्ने तरिका, घरबाटो तथा कित्ताको चार किल्ला एकिन गर्ने विधि, सरकारी सार्वजनिक जग्गा पहिचान तथा रेखाङ्कन, बाटो खोला लगायतको Right Of Way रेखाङ्कन, अनौपचारीक वस्तीहरुको पहिचान तथा नक्साङन, नापी कार्यालय र स्थानीय तह बीचको अन्तर सम्बन्ध।

2 Geographic Information System [4]

2.1 Introduction, components, data types, Vector and Raster data, GPS concept and process, RS concept and Process of image capturing, data base, application areas of GIS, Spatial Analysis, SDI concept, Level of SDI and its importance,

3 Land Use Planning (भू-उपयोग योजना) [6]

3.1 परिचय र महत्व, भूउपयोग क्षेत्र निर्धारण तथा योजना तर्जुमा विधि,, नेपालमा भूउपयोगको अवस्था- अन्तर्राष्टिरिय अभ्यास,

3.2 भूउपयोग योजना तर्जुमा तथा कार्यान्वयनमा स्थानीय तहको भूमिका

4 स्थानीय तहको भूमि व्यवस्थापन [4]

4.1 भूमि सुधार सम्बन्धी कार्यमा स्थानीय तहको भूमिका; जग्गा एकीकरण तथा जग्गा विकास, चक्लाबन्दी, जग्गा प्राप्ति, वस्ति

4.2 विकास/शहरी विकासको अवधारणा; सरकारी सार्वजनिक जग्गा व्यवस्थापनमा स्थानीय तहको भूमिका

5 भूमि सम्बन्धी नीतिगत तथा कानूनी व्यवस्था (स्थानीय तहसंग सम्बन्धित) [8]

5.1 नेपालको संविधान

5.2 भूउपयोग नीति. २०७२राष्ट्रिय भूमि नीति, २०७६

5.3 भूउपयोग ऐन २०७६,जग्गा प्राप्ति ऐन. २०३४ .

5.4 भूमि सम्बन्धी ऐन, २०२१

5.5 स्थानीय सरकार संचालन ऐन. २०७४

Part B: Lab Demonstrations [28 Sessions]

6 Familiarize with tools of GIS software

7 Data management and handing spatial and attribute data

8 Defining projection and Geo-referencing, scaling

9 Creating database and digitizing geo-referenced raster data, topology correction .

10 Attribute data entry and editing tabular data.

11 **Spatial and attribute query**

12 **Spatial analysis (Buffering, clipping, intersection etc.**

13 **Projection and transformation from Everest to WGS 84 and vice versa**

14 **Handling land use data**

15 **Simulating land use planning process**

16 **Data integration (topographical data, cadastral data, land use data etc.)**

17 **Use of freely available imageries for mapping**

18 **Use of freely available mapping application (android application)**

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

स्थानीय तहका लागि भूमि व्यवस्थापन सम्बन्धी तालीम

Course Code: STT0413

Introduction

Land Management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation, Government of Nepal, is mandated to conduct both short- and long-term professional training programs in the fields of Surveying and Mapping (Geomatics), Land Administration, and Land Management. Short-term trainings are primarily focused on enhancing the capacity of government and public sector employees in their respective areas of responsibility.

This training program has been specifically designed as a refresher and orientation course for employees and representatives working in land use and land management at the local level. It aims to strengthen their capacity to contribute effectively to land governance in line with federal structures and constitutional provisions that emphasize the role of local governments in land administration.

The course provides a comprehensive foundation in both theoretical and practical aspects of land management and land use. It introduces essential tools and technologies, including Geographic Information Systems (GIS), land use zoning, various data sources, and legal frameworks. Participants will also gain insights into recent technological developments in land use mapping.

Additionally, the course includes orientation sessions tailored for elected local representatives, focusing on legal provisions, land use practices, and the specific roles and responsibilities of local governments in land administration and management.

Objective

Upon the completion of this course, participants will be able to:

- Acquire theoretical as well as practical skill that assists during decision making and service delivery in local level.
- Learn/know different tools in land use management.

Target group: स्थानीय तहका जनप्रतिनिधिहरु तथा भूमि व्यवस्थापनको क्षेत्रमा कार्यरत कर्मचारीहरु

Approach of Instruction: Lecture Classes / Indoor Practical Classes / Field Works / /Project Work

Number of Participants: 20

Duration of Training: 10 days

Sessions per day: 4 Sessions per day (1 hour 30 minutes each session)

Total Number of Sessions: 40 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Assignment
- Presentation
- Regularity

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Content:

Part A: Theory [12 Sessions]

1 स्थानीय तहका जनप्रतिनिधिहरुका लागि पाठ्यकम (गोष्ठी) [4]

1.1 भूमि व्यवस्थापनका सन्दर्भमा संवैधानिक तथा कानूनी व्यवस्थाहरु (स्थानीय तहको अधिकार क्षेत्र समेत) भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग कार्यान्वयनमा स्थानीय तहको भूमिका र भूउपयोग सम्बन्धी अन्तर्राष्ट्रिय अभ्यासहरु।

1.2 मुलुकी देवानी संहितामा रहेका अचल सम्पत्ति तथा भूमि व्वस्थापन सम्बन्धी प्राबधानहरु।

2 Geographic Information System [2]

2.1 Introduction, components, data types, Vector and Raster data, GPS concept and process, RS concept and Process of image capturing, data base, application areas of GIS, Spatial Analysis, SDI concept, Level of SDI and its importance

3 Land Use Planning (भूउपयोग योजना) [2]

3.1 परिचय र महत्व, भूउपयोग क्षेत्र निर्धारण तथा योजना तर्जुमा विधि,, नेपालमा भूउपयोगको अवस्था- अन्तर्राष्टिरिय अभ्यास,

3.2 भूउपयोग योजना तर्जुमा तथा कार्यान्वयनमा स्थानीय तहको भूमिका

4 स्थानिय तहको भमि व्यवस्थापन [2]

4.1 भूमि सुधार सम्बन्धी कार्यमा स्थानीय तहको भूमिका; जग्गा एकीकरण तथा जग्गा विकास, चक्लाबन्दी, जग्गा प्राप्ति, वस्ति

4.2 विकास/शहरी विकासको अवधारणा; सरकारी सार्वजनिक जग्गा व्यवस्थापनमा स्थानीय तहको भूमिका

5 भूमि सम्बन्धी नीतिगत तथा कानूनी व्यवस्था (स्थानीय तहसंग सम्बन्धित)[2]

5.1 नेपालको संविधान

5.2 भूउपयोग नीति. २०७२राष्ट्रिय भूमि नीति, २०७६

5.3 भूउपयोग ऐन २०७६,जग्गा प्राप्ति ऐन. २०३४ .

5.4 भूमि सम्बन्धी ऐन, २०२१

5.5 स्थानीय सरकार संचालन ऐन. २०७४

Part B: Lab Demonstrations [28 Sessions]

6 Familiarize with tools of GIS software

7 Data management and handing spatial and attribute data

8 Defining projection and Geo-referencing, scaling

9 Creating database and digitizing geo-referenced raster data, topology correction .

10 Attribute data entry and editing tabular data.

11 Spatial and attribute query

12 Spatial analysis (Buffering, clipping, intersection etc.

13 Projection and transformation from Everest to WGS 84 and vice versa

14 Handling land use database

15 Updating land use database

16 Simulating land use planning process

17 Data integration (topographical data, cadastral data, land use data etc.)

18 Use of freely available imageries for mapping

19 Use of freely available mapping application (android application)

3

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

भूमि व्यवस्थापन संग सम्बन्धित उच्चतहका पदाधिकारीहरुका लागि पुनर्ताजगी कार्यक्रम

Course Code: SST0414

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Long-term trainings aim to produce human resources in the field of Surveying and Mapping, whereas the short-term trainings aim to upgrade the professional skill of Government employees in the field of their responsibilities.
This course is especially designed for the high-level officials working in the field of Land Administration and Management under the Ministry of Land Management, Cooperatives and Poverty Alleviation and the provincial ministries with similar responsibilities.

Objectives

Upon completion of this Training, the participants will be able to:

- Get updated with the relevant issues of land administration and management to be addressed by the Ministry of Land Management, Cooperatives and Poverty Alleviation and Departments

Targeted Audience:	High level officials working in the field of Land Administration and Management under the Ministry of Land Management, Cooperatives and Poverty Alleviation and the provincial ministries with similar responsibilities.
Approach of Instruction:	Lecture, Group Discussion, Presentation
Duration of the Course:	2 days
Sessions per day:	3 Sessions (1 hour and 30 minutes each session)
Total Number of Sessions:	6 Sessions

Course Contents

1 भूमि व्यवस्था, सहकारी तथा गरिवी निवारण मन्त्रालयले तत्काल सम्बोधन गर्नुपर्ने नीतिगत एवम् कानूनी विषय

2 जग्गा प्रशासन तथा भूमि व्यवस्थापन सम्बन्धी जनसरोकारका समसामयिक विषय

3 तीनै तहको समन्वयमा गर्नुपर्ने कामहरू सम्बन्धी विषय

4 नेतृत्व विकास तथा व्यवस्थापन सुधार सम्बन्धी विषय

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Training On Digital Cadastre

Course Code: STT0415

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This is one of the short-term training courses that is developed for the non-Gazetted surveyors basically working in cadastral surveying sector, as a refresher Course. This course will provide trainees with a solid foundation in both the theoretical and practical aspects of digital cadastre, enabling them to contribute to the digitalization of land administration processes. The key topics included in this course are concepts of GIS and cadastre, DBMS, general field procedure for cadastral survey, database preparation using Parcel Editor, map layout and various update tools in cadastre.

Objectives

Upon completion of this training, the participants will be able to:

- Acquire basic knowledge on Cadastral survey, GIS and Database Management System
- Carry out digital cadastral survey, update and maintain digital cadastral database
- Deliver cadastral services effectively in digital environment using SAEx or NeLIS application

Target group: Non-Gazetted surveyors

Approach of Instruction: Lecture Classes / Indoor Practical Classes / Field Works / /Project Work

Number of Participants: Minimum 10

Duration of Training: 9 working days

Sessions per day: 4 Sessions per day (1 hour 30 minutes each session)

Total Number of Sessions: 36 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Assignment
- Presentation
- Regularity

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Content

Theory and Demonstration [36 Sessions]

1 Cadastre and Geographical Information System [2]

- 1.1 Introduction to Cadastre, Concept of GIS, Digital Cadastre
- 1.2 Field and office procedures of Cadastre: Legal and technical issues
- 1.3 Data and information
- 1.4 Types of data (spatial and non-Spatial), data collection techniques, data format.
- 1.5 Relational database model (schema, relation, field, tuple, table), primary key, foreign key

2 Standard Operation Procedure (SOP) of Survey Department and related Guidelines.[2]

3 General Field Procedure [16]

- 3.1 Instrument Handling (2 Session)
- 3.2 Reconnaissance, Monumentation (2 Sessions)
- 3.3 Traversing, computation and accuracy -P/E assessment (6 Sessions)
- 3.4 Field data collection (12 Sessions)
- 3.5 Adjudication, Demarcation, Surveying/Mapping and Registration
- 3.6 Cadastral Data collection.

4 Database Preparation and Digitization –Using Parcel Editor Application. [12]

- 4.1 Software installation
- 4.2 Data download from Total Station
- 4.3 Database preparation using parcel editor
- 4.4 Creating Geo-database
- 4.5 Digitize features in proper feature class
- 4.6 Working with Attribute data.
- 4.7 Edit feature: over shoot, under shoot sliver polygon, validate topology etc.
- 4.8 Map Layout

5 Cadastral Documentation: [2]

- 5.1 Cadastral map, parcel-owner-tenant record preparation and management, parcel merge and split.
- 5.2 Field book, 7 days notification, Sresta, Land Ownership Certificate preparation and registration. Report generation, and Dissemination.

6 Update tools in Cadastre- parcel editor [2]

- 6.1 Parcel Query and data update
- 6.2 Parcel Splitting and merging,
- 6.3 Updating database and file map management
- 6.4 Halsabik transactions
- 6.5 Map Printing

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Open-Source Software-QGIS Training

Course Code: STT0416

Introduction

This short-term refresher course is intended for professionals across various fields who wish to become acquainted with QGIS, an open-source alternative to proprietary GIS applications. Designed at a fundamental level, the course aims to familiarize participants with QGIS software's interface, capabilities, and functionalities. The training materials comprise of theoretical sessions and practical exercises covering the usage of QGIS for basic tasks like spatial data handling, vector raster operations, spatial analysis, georeferencing and digitization, map layout preparation, Open Street Map (OSM) data download and coordinate transformations. At the end of the training, participants are required to undertake a project work on QGIS application, allowing them to implement the skills acquired during the training into a practical scenario. Overall, this training provides participants with the knowledge to effectively utilize QGIS for spatial data handling and analysis to support decision making in their professional application environment.

Objectives

Upon the completion of this course, participants will be able to:

- Understand open-source software and their importance
- Acquire basic knowledge on GIS using QGIS
- Manage spatial data and geo-database
- Analyze spatial data for the purpose of planning and decision making
- Visualize the analyzed spatial data

Target group: Employee of Government of Nepal, having basic computer skill and basic knowledge of Surveying and Mapping.

Approach of Instruction:	Lecture, Group Discussion, Project work, Field visit, Indoor Practical, Outdoor practical
Number of Participants:	20
Duration of Training:	2 Weeks
Sessions per day:	4 sessions (1 hour and 30 minutes each session)
Total Number of Sessions:	48 sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Assignment
- Project work
- Presentation,
- Regularity (at least 90%)

Attendance Requirement:

at least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

Part A: Theory [16 Session]

1 Theory: [16]

1.1 Introduction of GIS: Definition, Components of GIS, Application areas

1.2 Importance of Open-Source Platform.

1.3 Data types (Spatial and attribute data, Nominal, ordinal, interval and ratio data) and Data model (Vector and Raster data model (spatial data representation))

1.4 Spatial data capturing method (Primary and secondary data sources)

1.5 Data digitization and integration (digitizing error identification)

1.6 Various sources of freely available spatial data (OSM, Google earth, USGS etc.)

1.7 General Introduction to Map projection, Coordinate System (Horizontal and vertical datum) and Coordinate transformation

1.8 Spatial data analysis

1.9 Spatial data visualization

1.10 Map and Types of Map

1.11 Extension of QGIS

1.12 Basics of Scripting

Part B: Supervised Lab Demonstrations [32 session]

2 Lab Exercises [32]

2.1 Installation of open-source GIS software (QGIS installation)

2.2 Loading vector and raster data (handling software tools)

2.3 Editing spatial and attribute data

2.4 Loading X, Y coordinate data

2.5 Creating new spatial data layer (shape file)

2.6 Installation of required plugin

2.7 Geo-referencing scanned map

2.8 Digitization of georeferenced map

2.9 Spatial Analysis Tools (Union, Clip, merge, buffer etc.)

2.10 Network data handling

2.11 Digitization of features in base map

2.12 Layout preparation

2.13 Loading data from database

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Astronomical Observation Training

Course Code: STT0417

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This is one of the short-term training courses that is developed for the gazette or non-gazette employee government services. This training is designed to educate participants about the tools used for astronomical observations and the calculation of coordinates. It delves into GNSS observation and its processing techniques. The program is hands-on, emphasizing practical knowledge and includes site visits to locations in Nepal where astronomical observations are conducted.

Objectives

Upon the completion of this course, participants will be able to:

- Understand Principle of Astronomical Observation and satellite geodesy
- Establish control using GNSS
- Carryout Astronomical observation (Sun and Star) to determine latitude, longitude and azimuth
- Perform inter conversion between geodetic and astronomical co-ordinates

Target group:	Employee of Government of Nepal, having basic computer skill and basic knowledge of Surveying and Mapping.
Approach of Instruction:	Lecture, Group Discussion, Project work, indoor practical, Outdoor practical
Number of Participants:	20
Duration of Training:	1 Weeks
Sessions per day:	4 sessions (1 hour and 30 minutes each session)
Total Number of Sessions:	24 sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Attendance

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance) Astronomical Observation and Computation

Course Content

1 Astronomical Observation and Computation [8]

1.1 Terms, Theory and Concept
1.2 Datum and Coordinate System
1.3 Coordinate Transformation
1.4 Horizontal and Vertical control: Trigonometrical Survey
1.5 Practical: Coordinate Calculation and Transformation
1.6 Polar and Solar Observation and Computation

2 GNSS observation and Data processing Technique [6]

2.1 Satellite Geodesy: Basic Theory and Concept
2.2 Components
2.3 CORS: Concept
2.4 Field Procedure
2.5 Data processing
2.6 Use of Computer and mobile application: Stellarium, Skymap.etc.

3 Field Work [6]

3.1 Polar Observation
3.2 Star Observation
3.3 Sun Observation

4 Nagarkot Observatory Station Visit [4]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

भूमि प्रशासन तथा व्यवस्थापन तालीम (सहायक स्तर)

Course Code: SST0418

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Long-term trainings aim to produce human resources in the field of Surveying and Mapping, whereas the short-term training courses aim to upgrade the professional skill of Government employees in the field of their responsibilities.

This course is developed as a fulfilment of Non-Gazetted Personnel working in Land Revenue Offices. It delves into the administrative procedures related to the transfer of property rights, secondary land registration, land valuation, and land reform. Additionally, it covers the application of ICT in land administration and other relevant topics.

Objectives

Upon completion of this Training, the participants will be able to:

- Know the daily process of land administration
- Gain the knowledge of legal provisions regarding land administration.

Approach of Instruction: Lecture, Group Discussion, Presentation

Duration of the Course: 7 working days

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 28 Sessions

Evaluation Criteria:

Evaluation of this Module is conducted based on:

- Attendance
- Practice Session

Attendance Requirement:

Less than 90% attendance will disqualify the candidate for the completion of the training.

Course Contents

Part A: Land Administration and Management [24 Sessions]

1 रजिष्ट्रेशन सम्बन्धी [2]

1.1 रजिष्ट्रेशन गर्नुपर्ने लिखतको बारेमा जानकारी दिने

1.2 संलग्न गर्नुपर्ने प्रमाणको जानकारी गराउने

1.3 डोर तथा अधिकृतवारेशबाट लिखत पारित गराउने

1.4 नाबालक तथा बृद्धको नाउँबाट लिखत पारित

1.5 अदालतको फैसला बमोजिम दाखिल खारेज

1.6 गुठी/निजीगुठी समेतको लिखत पारित

1.7 संघसंस्थाको नाउँको लिखत पारित

1.8 सगोलनामा वा सगोलको जग्गा पारित

1.9 घरको तला वा खण्डे जग्गाको लिखत पारित

1.10 मोही लागेको घर / जग्गाको लिखत पारित

1.11 नगर विकास समिति / आयोगहरुबाट वितरित जग्गाको हक हस्तान्तरण

2 जग्गा दर्ता सम्बन्धी [2]

2.1 साविक लगत-विर्ता, रैकर र अठसट्टा

2.2 २ नं र ७ नं फाँटबारी

2.3 फिल्डबुक - दर्ता गर्न मिल्ने उल्लेख भएको

2.4 फिल्डबुकको व्यहोराको जानकारी,

2.5 फैसला बमोजिम जग्गा दर्ता

2.6 उखडा, आँकडा, विरौटी र कोदाले जग्गा दर्ता,

2.7 रैकर, गुठी विर्ता जग्गा दर्ता

2.8 सरकारी निर्णय वा आयोग तथा समितिको निर्णयानुसार जग्गा दर्ता, निर्णयपर्चा, राय किताब

2.9 नापी कार्यालयलाई जनाउ र राजश्व असुली

2.10 जग्गा दर्ता सम्बन्धी अन्य विषयहरुको जानकारी

3 जग्गा प्रशासन सम्बन्धी [3]

3.1 नामसारी सम्बन्धी-नामसारी गर्ने कानून बमोजिमका हकदारहरुको पहिचान, आवश्यक प्रमाण

3.2 दाखिल खारेज सम्बन्धी-बेजिल्ला वा बेइलाकाबाट पारित, शेषपछिको बकसपत्र, हालैको बकसपत्र,अंशबण्डा ३.३ बमोजिमको जग्गा दाखिल खारेज, भूमिसुधारको निर्णयानुसारको दाखिल खारेज,

फैसला वा निर्णयबोमोजिमको ३.४ दाखिल खारेज, लगतकट्टा, अधिग्रहण वा लिलाम बमोजिमको दाखिल खारेज र अन्य प्रकारको दाखिल खारेजहरु

3.3 संशोधन - जग्गाधनीको नामथर, वतन, बाबु, बाजे, पति, ससुरा फरक परेमा संशोधन

3.4 जग्गा सम्बन्धी विवरण कि.नं. किसिम, क्षेत्रफल, संशोधन

3.5 जालसाजी र किर्ते

3.6 कानून बमोजिमका अन्य संशोधन

4 जग्गाको न्यूनतम मूल्यांकन सम्बन्धी [1]

4.1 जग्गा मूल्यांकन

4.2 जग्गा मूल्यांकनका सैद्धान्तिक व्यवस्था र प्रक्रिया

4.3 न्यूनतम मूल्यांकन सम्बन्धी व्यवस्था

4.4 मूल्यांकनमा अपनाउनु पर्ने सजगताका विषयहरु

5 गुठी सम्बन्धी [2]

5.1 राजगुठी, छुटगुठी, रैतानगुठी, निजीगुठी लगायत सबै प्रकारका गुठी जग्गाहरु

5.2 गुठी जग्गामा मोही कायम र मोही निष्कासन सम्बन्धी

5.3 गुठी तैनाथी र अधिनस्थ जग्गा

5.4 गुठी जग्गाको मालपोत, राजश्व, नगद वा जिन्सी

5.5 गुठी जग्गाको सट्टापट्टा वा अधिग्रहण र रैतानी

5.6 गुठी जग्गाको प्रशासन र व्यवस्थापन

5.7 गुठी जग्गा लोप हुने अवस्थाको समस्या

5.8 गुठी जग्गाको अभिलेख र परिचालन,

5.9 गुठी जग्गाको राजस्व असुलीमा देखिएका समस्याहरु,

5.10 कुत र बाली बुझाउने विषयको समस्या,

5.11 गुठी जग्गामा मोही कायम गर्ने र हटाउने विषयको समस्या,

5.12 पूजा, पर्व चलाउने पुरानो दरवन्दीको समस्या,

5.13 गुठी जग्गाको प्रशासन र व्यवस्थापनको समस्या र उपर्युक्त समस्याहरुको समाधानका कानूनी र व्यवहारीक उपायहरु

5.14 गुठी जग्गा सम्बन्धी अन्य व्यवस्था

6 भूमिसुधार सम्बन्धी [2]

6.1 भूमिसुधारको सैद्धान्तिक, कानूनी तथा व्यवहारिक पक्षहरु

6.2 विभिन्न किसिमका फाँटबारीहरु

6.3 मोही बाँडफाँड, मोहीयानी हकको संरक्षण

6.4 मोही लगत तथा मोही निष्कासन

6.5 मोही कायम, क्षतिपूर्ति, भूमिसुधार सम्बन्धी अन्य विविध विषयहरु

6.6 मोहीयानी हक र द्वैध स्वामित्त्वको अन्त्य

6.7 जग्गाको हदबन्दी

6.8 जग्गा बाँडफाँडमा देखिएका समस्याहरु र सामाधानहरु

7 रीट, मुद्दा र हकसाफी सम्बन्धी [2]

7.1 हकसाफीको हकदैया हुन सक्ने अवस्थाहरुको ज्ञान

7.2 फिराद पत्र लेखन तथा अदालतको दर्ता प्रकृया

7.3 हकसाफीको लागि समावेश हुनु पर्ने प्रमाण र अवस्था

7.4 सन्धीसर्पनको अर्थ र प्रयोग

7.5 मुद्दाको तारेख र वारेसको जानकारी,निर्णय र पुनरावेदन

7.6 कार्यालयको पक्ष वा विपक्षमा हुने मुद्दाहरु

7.7 लिखित जवाफ, हदम्याद र म्याद थप

7.8 मुद्दा सम्बन्धी अन्य विषयहरु

8 प्रभावकारी सेवा प्रवाहका लागि अन्य निकायहरुसँग सहकार्य [1]

8.1 नापी कार्यालय, स्थानीय तह, जिल्ला प्रशासन कार्यालय, सरकारी वकिलको कार्यालय, जिल्ला/ उच्च अदालत, बैंक तथा वित्तिय संस्था, कोष तथा लेखा नियन्त्रकको कार्यालय, आन्तरिक राजश्व कार्यालय, प्रदेशस्तरिय निकायहरु, आदि

8.2 ICT application in land administration

8.3 राजश्व तथा धरौटी (३ सत्र)

8.4 रजिष्ट्रेशन शुल्क, दस्तुर

8.5 पुँजीगत लाभ कर

8.6 धरौटी

8.7 धरौटी राख्ने र फिर्ता पाउने अवस्था

9 श्रेस्ता अद्यावधिक र प्राविधिक सहयोग [2]

9.1 पुर्जा प्राप्त गरेको जग्गा र प्राप्त नगरेको जग्गाको श्रेस्ता अद्यावधिक

9.2 रोक्का रहेको जग्गाको श्रेस्ता अद्यावधिक

9.3 ब्लकमा नापी भएको जग्गाको श्रेस्ता अद्यावधिक

9.4 नाप नक्सा, नभएको जग्गाको अद्यावधिक

9.5 सिमाना परिवर्तन भएको जग्गाको अद्यावधिक

9.6 ठाउँसारी वा आकार प्रकारको फरक भएको जग्गाको अद्यावधिक

9.7 हालसाविक

9.8 साविकमा दर्ता बाँकी रहेको तर पुनः नापीमा श्रेस्ता प्रमाणित भएको जग्गाको अद्यावधिक

9.9 साविकको कुलो बाटो हाल पुर्जा कायम भएको जग्गाको श्रेस्ता अद्यावधिक

9.10 साविकको दर्ता प्रमाणित जग्गा हाल सरकारी वा सार्वजनिक प्रकृतिको जग्गाको श्रेस्ता अद्यावधिक

9.11 तेरीज/कित्ता श्रेस्तामा नचढेको जग्गाको श्रेस्ता अद्यावधिक

10 रोक्का व्यवस्थापन [1]

10.1 कानून बमोजिम लेखी आएको जग्गा रोक्का राख्ने

10.2 दोहोरो रोक्का, अस्पष्ट आदेशको रोक्का, गोश्वारा रोक्का, कार्यालय आफैले राख्ने रोक्का

10.3 व्यक्ति विशेषको अनुरोधमा राख्ने रोक्का

10.4 धितो वन्दकी लिखत पारित वा पत्रबाट गरिने रोक्का

10.5 रोक्का, फुकुवा र रोक्का दस्तुर

10.6 लिखत बाइन्डिङ्ग र फाइल पञ्जिका

10.7 रोक्का सम्बन्धी अन्य विभिन्न व्यवस्था

11 तामेली व्यवस्थापन [1]

11.1 लिखत तामेल

11.2 मिसिल तामेली

11.3 दर्ता किताब

11.4 लिखत कट्टा

11.5 प्रतिलिपी, लिखत उतार

11.6 तामेलीको संरक्षण र व्यवस्थापन

12 मोठ व्यवस्थापन [1]

12.1 मोठ श्रेस्ता

12.2 मोठ वाइन्डिङ्ग, मोठ पंजिका

12.3 जीर्ण श्रेस्ता वा श्रेस्ता थप

12.4 एकल वा बहुल जग्गाधनी र खण्डे जग्गा

12.5 दर्ता प्रमाणित वा दर्ता बाँकी श्रेस्ता

12.6 निजीगुठी, मोही हकहिस्सा जानिएको मोठ श्रेस्ता

12.7 प्रमाण संकेत वा कैफियत व्यहोरा

12.8 तीनपुस्ता प्रमाणित वा फोटो प्रमाणित

12.9 साविक र पुनः नापीको श्रेस्ता

12.10 लगत कट्टा, श्रेस्ता उतार,नक्कल

12.11 श्रेस्ता प्रमाणित र दाखिला टिपोट

13 सरकारी तथा सार्वजनिक जग्गाको संरक्षण [1]

13.1 श्रेस्ता संरक्षणको लागि मालपोत कार्यालयको जिम्मेवारी दायित्व

13.2 नापी कार्यालयको जिम्मेवारी र दायित्व

13.3 स्थानीय प्रशासनको जिम्मेवारी र दायित्व

13.4 स्थानीय तहको जिम्मेवारी र दायित्व

13.5 नागरिकको जिम्मेवारी र दायित्व

13.6 सरकारको जिम्मेवारी र दायित्व

13.7 अभिलेख व्यवस्थापन

14 नाप नक्सा सम्बन्धी नयाँ प्रविधी एवं व्यवहारिक ज्ञान [3]

14.1 ग्राफिकल एवं डिजिटल कित्तानापी

14.2 भूमि व्यवस्थापनमा भू-सूचना प्रणालीको भूमिका

14.3 नक्सा अध्ययन, कित्ताको पहिचान, क्षेत्रफल संगणना

14.4 हालसाबिक कार्य सम्बन्धी जानकारीनाप नक्सा तथा जग्गा प्रशासन सम्बन्धी अन्तरराष्ट्रिय प्रवृत्ति तथा समसामयिक विषयवस्तु

15 लिज निति, जग्गा परापति सम्बन्धी व्यवस्था LRIMS/PAM/DMS सम्बन्धी ज्ञान [4]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

अनौपचारिक भू-सम्बन्ध नक्साङ्कन तालीम

Course Code: SST0419

पृष्ठभूमि

भूमिहीन सुकुम्बासीलाई जग्गा उपलब्ध गराउन तथा अव्यवस्थित बसोवासीलाई व्यवस्थापन गर्ने प्रयोजनका लागि भूमि सम्बन्धी ऐन, २०२१ को दफा ५२ख. को उपदफा (६) बमोजिम नेपाल सरकारबाट भूमि सम्बन्धी समस्या समाधान आयोग गठन भै आयोगले कार्य प्रारम्भ गरिसकेकोछ। आयोगको प्रमुख उद्देश्य परिपूर्तिका लागि अनौपचारिक र अव्यवस्थित रूपमा बसोवास गरिरहेका परिवारहरू र सम्बन्धित जग्गाको लगत आवश्यक पर्ने हुन्छ । गठन आदेशमा व्यवस्था भए बमोजिम तीन वर्ष अवधिको कार्यकालमा आयोगले आफ्नो सम्पूर्ण जिम्मेवारी पूरा गर्नु पर्ने भएकोले छोटो अवधिमैं देशभरबाट यस किसिमको विवरण एवम लगत संकलन गर्नुपर्ने हुन्छ। आयोगको यसै आवश्यकतालाई मध्यनजर गरी अनौपचारिक र अव्यवस्थित रूपमा बसोवास गरिरहेका परिवारहरू र सम्बन्धित जग्गाको लगत तथा अन्य आवश्यक विवरण संकलन गर्ने कार्यमा खटिने कर्मचारीहरूको लागि “अनौपचारिक भू-सम्बन्ध नक्शांकन सम्बन्धी तालीम” संचालन गर्न यो पाठ्यक्रम तयार गरिएकोछ ।

उद्देश्य

यस तालिमको प्रमुख उद्देश्य तालीमका सहभागीहरूलाई तालीम पश्चात देहायका काम गर्न सक्षम तुल्याउने रहेकोछः

- आयोगको उद्देश्य र कार्यप्रक्रियाका साथै भूमि र भूउपयोग कानुनबारे आधारभूत जानकारी हासिल गर्ने
- नवीनतम प्रबिधिको प्रयोग गरी अनौपचारिक भूसम्बन्धको नक्शाङ्कन गर्ने
- सम्बन्धित व्यक्तिलाई आयोगबाट तयार गरिएका प्रश्नावलीहरु भर्न लगाउने
- आयोगबाट तोकिए बमोजिमका अन्य लगत तथा विवरण संकलन गर्ने
- जग्गाको लगत अभिलेखन तथा विश्लेषण प्रणाली संचालन गर्न सक्षम हुने

लक्षित समूह

आयोगको उद्देश्य परिपूर्तिका लागि अनौपचारिक भू-सम्बन्ध नक्शांकन सम्बन्धी कार्यमा नापी विभाग वा सम्बन्धित स्थानीय तहबाट खटाइने वा खटाइएका देहायका कर्मचारीहरूका लागि यो तालीम लक्षित गरिएको छः

- नापी अधिकृत, सर्भेक्षक र अमिन

तालीम अवधिः ७ कार्य दिन

दैनिक सत्रः चार सत्रः (प्रति सत्र १ घण्टा ३० मिनेट)

जम्मा सत्र २८ सत्र

तालीम विधिः सैद्धान्तिक कक्षा, फिल्ड सहितको प्रयोगात्मक कक्षा

तालीम स्थल केन्द्र परिसर वा सम्बन्धित स्थानीय तहका लागि पायक पर्ने स्थानमा (प्रादेशिकस्तरमा)

विषयवस्तुहरु

सैद्धान्तिक [8 Sessions]

1 आयोगको परिचय र कानूनी व्यवस्था [2]

1.1 आयोगको काम संग सम्बन्धित विद्यमान कानूनी ब्यवस्था

1.2 कार्यविधिहरू, अनुसूचीहरु

1.3 आयोगको कामका लागि संस्थागत जिम्मेवारी तथा सरोकारवाला निकाय/संस्था/व्यक्तिहरू

2 स्थानिय तह तथा नापी कार्यालयहरुको जिम्मेवारी [1]

2.1 सूचना प्रकाशन, लगत संकलन तथा प्रमाणीकरण

2.2 सहभागितामूलक नापनक्शा, लगत संकलन तथा निर्णयका विधिहरू

3 Cadastral Mapping with UAV and satellite imageries [4]

3.1 UAV/Drone, Orthophoto

3.2 Satellite Image, Image interpretation techniques

4 Identification of Government and Public Land, Land Use Categorization Techniques [1]

प्रयोगात्मक (कक्षाकोठा वा फिल्डमा आधारित) [20 Sessions]

5 Basic Concept of Parcel Editor [2]

6 Use of Cadastral Mapping Application [१०]

6.1 Geodatabase Preparation

6.2 Digitization

6.3 Attribute data entry

6.4 Documents Preparation and Printing

6.5 Map Layout and Printing

6.6 Updating and Maintenance

6.7 Checking Error and Completeness

6.8 Topological Validation

7 Image Interpretation [6]

7.1 Identification of details/Parcel Boundary

7.2 Digitization of parcel using satellite imageries/ drone images

7.3 Collection of latitude and longitude of the related parcel

8 Delineation of parcel on the ground and area computation from field measurement [2]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Map Reading Training

Course Code: STT0420

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities. This is one of the short-term training courses that is developed for the Personnel from Banking and tourism board as the Refresher Course.

This course is designed for participants who have little to no experience in map reading, despite their roles being related to surveying. It offers a fundamental introduction to maps and their components, differentiating between map features and their corresponding real-world elements. The course also introduces open-source mapping software, guiding participants on how to navigate them. Attendees will also learn about basic tools for map exploration, gathering data from GPS devices, and downloading this data to create basic maps.

Objectives

Upon completion of the course, the participants will be able to:

- To develop the Map Reading Skill

Target group: Personnel from tourism board

Approach of Instruction: Lecture, Group Discussion, Project work, Field visit, indoor practical, Outdoor practical

Number of Participants: 20

Duration of Training: 1 Week

Sessions per day: 4 (1 hour and 30 minutes each session)

Total Number of Sessions: 22 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Attendance
- Practice Session

Attendance Requirement:

at least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

Part A: Theory [14 session]

1 Introduction [2]

- 1.1 Importance of Map Reading
- 1.2 Basic Elements of Map and Types of Maps
- 1.3 Understanding the Theme and Scale of Maps
- 1.4 Uses of Maps

2 Map Reading techniques [4]

- 2.1 Measurement of Angle Distance
- 2.2 Identifying the landmarks and dimension of features.
- 2.3 Geographical names and Map symbols

3 Open-source Map [4]

- 3.1 Introduction to different open-sourced map platforms
- 3.2 Accessing the various map services
- 3.3 Google maps, Bing map, Open-street maps etc.
- 3.4 Downloading and using the data from map platforms.

4 Introduction to Basic GPS techniques [4]

- 4.1 Basic working principles of GPS
- 4.2 Different available GPS services
- 4.3 Navigation and route findings using GPS.
- 4.4 Hand-held GPS handling and data capturing and their accuracy.
- 4.5 Downloading the data from GPS devices

Part B: Field Demonstrations [8 sessions]

5 Parcel identification in field [2]

6 Distance measurement on Map and field [2]

7 Area Measurement on Map and field [2]

8 Route racking by Handheld GPS [2]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Web GIS Training

Course Code: STT0421

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities. This training is one of the short-term refresher training courses designed for the participants from diverse field wiling to learn the fundamentals of Web GIS and mapping.

The training material comprises of theoretical sessions and practical exercises covering topics like web GIS platform's introduction, basic HTML, CSS, and JavaScript scripting, integration of spatial databases into web applications, utilizing libraries for front end and back-end web development and exploring QGIS/ArcGIS functionalities for launching web maps. Overall, the course structure aims to equip participants with the necessary skills to design a basic architecture for sharing maps via web, enriched with additional GIS capabilities. Towards the end of the training, participants get opportunity to put their acquired knowledge into practice through a hands-on mini project in WebGIS which allows them to transform their two-week course learnings into a practical real-world application.

Objective

Upon completion of the course, the participants will be able to:

- Understand basic concept of Web GIS
- Understand web services and web maps
- Visualize map in web platform

Target group:	Employee of Government (Technical groups) with sound Knowledge of GIS and basic programming
Approach of Instruction:	Lecture, Group Discussion, Project work, indoor practical
Number of Participants:	20
Duration of Training:	2 weeks
Sessions per day:	4 (1 hour and 30 minutes each session)
Total Number of Sessions:	48 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Assignment
- Project works
- Presentation

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

Part A: Theory and Demonstrations [48 Sessions]

1 Introduction to Web GIS and Web Mapping [4]

1.1 Introduction and History of Web Mapping,

1.2 Different Web GIS platform (ArcGIS, Mapbox, OSM, etc.)

2 Designing Web Services and web maps [8]

2.1 Introduction to simple HTML/CSS/JS Essentials, Javascript

3 Data Acquisition [4]

3.1 Introduction to Volunteered Geographic Information (VGA)

3.2 Data collection using open data kit (ODK)

4 Spatial Database Management System in Online platform [4]

4.1 Introduction to Postgres database

4.2 Building spatial database using PostgreSQL, PostGIS

5 Geospatial content management system [6]

5.1 Introduction to Geoserver, Geonode, Geonetwork, HTTP server

6 Passing back-end to front end [4]

6.1 Introduction to Django and Geo-django

6.2 Creating a GeoDjango application skeleton

6.3 Adding a spatial database to our Django backend

7 Front end development [4]

7.1 Open layers, leaflet

8 Visualization techniques [6]

8.1 Introduction to QGIS

8.2 Introduction to ArcGIS Online

8.3 Story Maps Overview

9 Mini-Project using web GIS [8]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Advanced Geodesy

Course Code: STT0422

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities. This is one of the short-term training courses that is developed for the advancing the knowledge of geodesy for officer level governmental employee.

This course covers topics related to GNSS and satellite geodesy. It also delves into the techniques and instruments used in gravity surveying.

Objective

Upon completion of the course, the participants will be able to:

- Understand Principle of GNSS and satellite geodesy
- Concept of Gravity and gravity surveying
- GNSS data collection, gravity data collection
- Time series analysis using GNSS data
- Conversion of ellipsoid height to Ortho-metric height

Target group: Professionals from department of mines and geology, Survey Department, NAST (Nepal Academy of Science and Technology)

Approach of Instruction: Lecture, Group Discussion, Project work, indoor practical

Number of Participants: 20

Duration of Training: 1 week

Sessions per day: 4 (1 hour and 30 minutes each session)

Total Number of Sessions: 24 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Assignment
- Project works
- Presentation

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Part A: Theory [10 Sessions]

1 GNSS Principle and Application [5]

1.1 Terms, Theory and Concept: Geoid, Ellipsoid, Earth's Topography

1.2 CORS: Principle, Application and Usage of CORS data, Semi Dynamic Datum

1.3 Scientific Application of GNSS: Geophysical Phenomena: Study Tectonic Plate Movement, Continental Drift, Sea Level Rise etc.

1.4 Reference system and reference frame

1.4.1 Global Geodetic Observing System, ITRS, ITRF

1.5 Space Geodetic Techniques: VLBI, SLR, GNSS, DORIS

2 Gravimetric Survey [5]

2.1 Basics of Gravimetry

2.2 Introduction to Gravity Survey: Gravitational Potential, Gravity reduction, different types of gravity survey (platform based), Global geopotential models

2.3 Gravimeter: Absolute and Relative Gravimetry (instrument and their principle)

2.4 Different terms in gravimetry: gravity, gravity anomaly, gravity disturbance, geoid height, deflection of vertical

Part B: Supervised Lab Demonstrations [14 Sessions]

3 GNSS data collection [6]

3.1 GNSS data collection and processing

3.2 GNSS adjustment and correction

3.3 Calculate Ortho-metric heights in gravity points

4 GNSS data processing [4]

4.1 Station data download (observation data, navigation data, Hatanaka format, RINEX format), Station log file

4.2 Preparation of different parameters for processing

4.3 Computation weekly/monthly solution

5 Time series analysis of station coordinates [4]

5.1 Trend analysis of station coordinates in x, y, z or in easting, northing or up component

5.2 Compute station velocity

5.3 Check if there exist discontinuities; discontinuities possible due to alteration in hardware, software, anthropogenic effects, earthquakes, seasonal effects etc.

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

जिल्ला न्यायाधीशहरुका लागि जग्गा प्रशासन सम्बन्धी अनुशिक्षण कार्यक्रम

Course Code: STT0423

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This is one of the short-term training courses that are developed for the judges in different district courts of Nepal as a refresher Course. It is designed to illuminate the intricate interplay between Land Administration and the judicial decision-making process, the syllabus outlines focused contents covering Basic Land Administration, Land Registration, Service Delivery by Land Revenue and Survey Offices, and Decision Making in Land Cases, which assumes to equip participants with a comprehensive understanding of the legal complexities surrounding land-related matters, empowering District Court Judges to navigate and adjudicate such cases with a nuanced perspective that amalgamates both theoretical knowledge and practical application.

Objectives

Upon the completion of this course, participants will be able to:

- know the knowledge on Surveying and Mapping
- know the knowledge on Cadastral Survey and Map Reading
- Procedure of Land Administration in Nepal

Target group:

Approach of Instruction:	Lecture, Group Discussion, Project work, indoor practical, case studies
Number of Participants:	**20**
Duration of Training:	**4 days**
Sessions per day:	5 (1 hour and 30 minutes each session)
Total Number of Sessions:	**20 sessions**

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Attendance

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

1 **नेपालको जग्गा प्रशासन प्रणाली (विगत र वर्तमान [1]**

2 **कित्तानापी नक्सा सम्बन्धी जानकारी [2]**

2.1 कित्तानापी नक्सा, माननाप दूरी अंकित, क्षेत्रफल संगणना, छुटफरक, आदि

3 **नापी तथा मालपोत कार्यालयहरुबाट प्रवाह हुने सेवाहरुको जानकारी [2]**

3.1 नक्सा प्रिन्ट, फिल्डबुक उतार, प्लट रजिष्टर उतार, कित्ता काट, टायल चेक, कित्ता एकिकरण र फिल्ड रेखांकन

3.2 पुन नापी पछिको जग्गा दर्ता, नक्सा संशोधन ।

3.3 छुट जग्गा दर्ता, स्ववासी/बेनिस्सा जग्गा दर्ता ।

3.4 श्रेष्ता, ज.ध. प्रमाण पूर्जा, रोक्का, फुकुवा, दा.खा., नामसारी तथा हक-हस्तान्तरणका अन्य व्यवस्थाहरु.

4 **गुठी जग्गा सम्बन्धी व्यवस्था [2]**

5 **जग्गा प्रशासनमा जालसाजी तथा किर्ते कार्य/कागजात नियन्त्रणका चुनौतीहरु [1]**

6 **अदालती फैसला कार्यान्वयनका चुनौतीहरु [1]**

7 **समसामयिक विषयहरुमा छलफल [1]**

8 **भूमि सुधार सम्बन्धी [1]**

9 **सार्विक प्रमाण [1]**

10 **Stress Management [2]**

11 **सहभागीहरुबाट प्राप्त मामिला र चुनौतीहरुमाथी छलफल [2]**

12 **योगा [4]**

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

अदालतका नापी प्राविधिकहरू (अमिन/सर्भेक्षक) का लागि सर्भे यन्त्र उपकरण संचालन सम्बन्धी तालीम

Course Code: STT0424

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities. This is one of the short-term training courses that is developed for the newly recruited Amin and Surveyor of court as the Pre-service Training.

This course seeks to equip participants with a comprehensive understanding of Surveying and Mapping, blending both theoretical knowledge and hands-on experience. By focusing on both traditional and contemporary survey instruments related to their specific job roles, we aim to enhance their practical application in real-world public service tasks. The overall decision-making process providing the justice is based on the proper use of these survey instruments which ensures the accurate data. The key topics included in this course are concepts of land demarcation, Cadastral Surveying, instrument handling and data processing, digital cadastral.

Objectives

Upon completion of the course, the participants will be able to:

- To know the knowledge on Cadastral data collection methods.
- To know the procedure cadastral data update in both Napi Karyalaya and Malpot Karyalaya.
- To know the procedure of पुन नापी पछिको जग्गा दर्ता.
- To know the knowledge of dispute settlement regarding land.
- To achieve the knowledge of the field demarcation.

Target group:	Newly recruited Amin and Surveyor of court
Approach of Instruction:	Lecture, Group Discussion, Field visit, Indoor practical, Outdoor practical
Number of Participants:	20
Duration of Training:	7 working days
Sessions per day:	4 (1 hour and 30 minutes each session)
Total Number of Sessions:	28 sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Attendance

Attendance Requirement:

At least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

1 नेपालको जग्गा प्रशासन प्रणाली (विगत र वर्तमान) [1]

2 नापी तथा भूमिसुधार तथा मालपोत कार्यालय/मालपोत कार्यालयहरुबाट प्रवाह हुने सेवाहरुको जानकारी [1]

2.1 नक्सा प्रिन्ट, फिल्डबुक उतार, प्लट रजिष्टर उतार, कित्ता काट, टायल चेक, कित्ता एकिकरण र फिल्ड रेखांकन

2.2 पुन नापी पछिको जग्गा दर्ता, नक्सा संशोधन ।

2.3 छुट जग्गा दर्ता, स्ववासी/बेनिस्सा जग्गा दर्ता ।

2.4 श्रेष्ता, ज.ध. प्रमाण पूर्जा, रोक्का, फुकुवा, दा.खा., नामसारी तथा हक-हस्तान्तरणका अन्य व्यवस्थाहरु।

3 जग्गा खिचोलोका विषय नरम-गरमका व्यबहारिक पक्षहरु, नक्सा मुचुल्का, बण्डा मुचुल्का लेखन तथा फैसला कार्यान्वयनका विषयहरु [2]

4 Digital Cadastral Map generation using Total Station [24]

4.1 Planning and Reconnaissance

4.2 Monumentation

4.3 Control Survey (Traverse, DGPS, etc.)

4.4 Detail survey using Total Station

4.5 Cadastral map and documents preparation

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

स्थानीय तहकालागि भूमि व्यवस्थापन तथा भूउपयोग सम्बन्धी अभिमुखीकरण कार्यक्रम

Course Code: STT0425

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Mainly short-term trainings aim to contribute in the capacity development of the employees from the Government and Public Sector in the field of their responsibilities.

This is one of the short-term training courses that is developed for the people's representatives from municipalities and rural municipalities. This training aims to provide with basic knowledge to the elected representatives such as legal arrangements, Land related policies, land use practices and roles and responsibilities of local government in Land Management.

Objective:

Upon the completion of this course, participants will be able to:

- Acquire knowledge on legal provision and aspects of land use planning for local level.

Target Group: Mayor, Deputy Mayor or Vice-chairperson, Ward Chair-persons of Local Level

Destination: As convenient to the participants, as far as the allocated resource is sufficient to meet the logistical arrangement

Approach of Training:	Lecture and Group Discussion
Number of Participants:	20
Duration of Training:	2 Days (8 Sessions)
Sessions per day:	4 (1 hour and 30 minutes each session)
Total Number of Sessions:	8 sessions

Course Content:

1. भूमि सम्बन्धी संवैधानिक तथा नीतिगत व्यवस्था (नेपालको संविधानमा भएका भूमि सम्बन्धी व्यवस्था, राष्ट्रिय भूमि नीति, २०७५; भूउपयोग नीति, २०७२ लगायतमा भएका व्यवस्था [2]
2. भूमि सम्बन्धी कानूनी व्यवस्था र स्थानीय तहको जिम्मेवारी (भूमि सम्बन्धी ऐन, २०२१; भूपयोग ऐन, २०७६; भूउपयोग नियमावली, २०७९; स्थानीय सरकार संचालन ऐन, २०७४; मुलुकी देवानी संहिता लगायत [2]

3. भू -उपयोग योजना तर्जुमा र कार्यन्वयन : स्थानीय तहको काम कर्तब्य र अधिकार [1]
4. स्थानीय तहमा भूमि सम्बन्धी मुद्दा र न्यायिक निरुपणमा समितिको भूमिका [1]
5. स्थानीय जग्गा प्रशासनमा वडा अध्यक्षको भूमिका र विभिन्न किसिमका सिफारिसहरु [1]
6. छलफल, अन्तरक्रिया [1]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

स्थानीय तहमा कार्यरत प्राविधिक कर्मचारीहरुका लागि GIS तालिम

Course Code: STT0426

Introduction

The Land Management Training Centre, operating under Nepal's Ministry of Land Management, Cooperatives, and Poverty Alleviation, is entrusted with multiple roles, including organizing both brief and extended professional courses in Surveying and Mapping (Geomatics), Land Administration, and Land Management. One of its key focuses is on delivering concise training sessions designed to enhance the skills of government and public sector personnel in alignment with their roles. This specific short-term training program serves as a refresher course tailored for technical staff at the local government level.

This specialized course is carefully designed to provide participants with comprehensive expertise in Geographic Information Systems (GIS). It balances theoretical foundations with practical experience by exploring GIS interfaces, various tools, and important extensions. The training includes hands-on lab exercises that guide participants through crucial tasks like downloading and visualizing data, defining projections, conducting spatial queries, and analyzing local-level information. The course concludes by teaching participants map layout and printing techniques, ensuring they can effectively communicate and use their insights for sustainable local development.

Objectives

Upon completion of the course, the participants will be able to:

- acquire basic knowledge on GIS, manage spatial data and Geo-database,
- analyze spatial data for the purpose of planning and decision making and
- visualize the analyzed spatial data
- gain hands-on exercise on GIS softwares, applications and spatial data management.
- Apply GIS techniques to real world scenarios.

Target Group:	Technical employees of Local Level Government (Amin, Surveyor, Engineers etc.)
Approach of Instruction:	Theoretical Lectures, Practical Classes, Case studies, Project works
Number of Participants:	20
Duration of Training:	2 weeks
Sessions per day:	4 (1 hour 30 minutes each session)
Total Number of Sessions:	56 Sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Project work
- Final presentation.

Attendance Requirement:

at least 90% of total sessions (No certificate will be issued to the participant having less than 90% attendance)

Course Contents

Part A: Theory: [12 Sessions]

1 Introduction to GIS [2]

1.1 Definition, evolution, components, applications of GIS

1.2 The nature of Geographic phenomenon

1.3 Data, Data types and model

2 Coordinate and Projection system in Nepal [2]

2.1 Projection and Spatial reference systems

2.2 Coordinate Reference System

2.3 Transformation

3 Database Management System [1]

3.1 Basic Concept of database for GIS

4 Data Acquisition and preparation [1]

4.1 Data sources

4.2 Data preparation and input techniques

4.3 Data editing, verification and Topology

4.4 Data Quality

5 Spatial data analysis [2]

5.1 Vector Data Analysis

5.2 Raster Data Analysis

6 Land use Mapping and classification in Local Level [3]

6.1 Introduction

6.2 Process of preparation of Land use Map

6.3 Uses of Land use map in Local Level

6.4 Land classification in Local level.

7 Spatial Data visualization [1]

7.1 Data Symbolization

7.2 Composition and Map Layout

7.3 Map dissemination

Part B: Lab Demonstration [30 Sessions]

8 **Familiarize with tools of GIS software [2]**

9 **Database Design, Create Spatial and Attribute Data [2]**

10 **Defining projection, Geo-referencing, scaling and transformation**

11 **Digitization and Topology Validation. [4]**

12 **Attribute data entry and editing tabular data [2]**

13 **Spatial and attribute query [2]**

14 **Spatial analysis (Buffering, clipping, intersection etc.): Vector Data Analysis and Raster Data Analysis [2]**

15 **Thematic data application and visualization: Symbolization, Visual Variables [2]**

16 **Projection and transformation from local to global and vice versa. [2]**

17 **Handling and updating Land use data in Local Level [4]**

18 **Map Layout and map printing [2]**

19 **Working with satellite image, mobile applications [2]**

20 **Downloading free spatial Data from various sources [2]**

Part C: Project Work and Final Presentation [12 Sessions]

21 **GIS को प्रयोग गरी सरकारी तथा सार्वजनिक जग्गाको पहिचान तथा संरक्षण**

22 **Introduction to GIS and Its application in Local Level**

23 **जग्गा खण्डीकरण ,चक्लाबन्दी ,शहरीकरण ,लगतकट्टा आदि**

24 **Spatial data source-geo-portals, OSM, Google earth, etc. and mobile application for spatial data capturing**

25 **Land Use data updating**

26 **Suitability analysis**

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

अनौपचारिक भू-सम्बन्ध सम्बन्धि तालीम

Course Code: SST0427

पृष्ठभूमि

भूमि व्यवस्था, सहकारी तथा गरिबी निवारण मन्त्रालय अन्तरगत रहेका भूमि व्यवस्थापन प्रशिक्षण केन्द्रले जग्गा प्रशासन तथा भूमि व्यवस्थापनको क्षेत्रमा लामो तथा सानो अबधिका तालिमहरु दिदै आएकोमा सानो अबधिका लालीमहरुले नेपाल सरकारका बिभिन्न निकायमा कार्यरत कर्मचारीहरुको वृतिविकास र क्षमता विकासमा अधारित हुन्छ। भूमिहिन दलित, भूमिहीन सुकुम्बासीलाई जग्गा उपलब्ध गराउन तथा अव्यवस्थित बसोवासीलाई व्यवस्थापन गर्ने प्रयोजनका लागि भूमि सम्बन्धी ऐन, २०२१ को दफा ५२ख. को उपदफा (६) बमोजिम नेपाल सरकारबाट भूमि समस्या समाधान आयोग गठन भै आयोगले कार्य प्रारम्भ गरिसकेकोछ। आयोगको प्रमुख उद्देश्य परिपूर्तिका लागि अनौपचारिक र अव्यवस्थित रूपमा बसोवास गरिरहेका परिवारहरू र सम्बन्धित जग्गाको लगत संकलन गर्ने। गठन आदेशमा व्यवस्था भए बमोजिम तीन वर्ष अवधिको कार्यकालमा आयोगले आफ्नो सम्पूर्ण जिम्मेवारी पूरा गर्नु पर्ने भएकोले छोटो अवधिमैं देशभरबाट यस किसिमको विवरण एवम लगत संकलन गर्नुपर्ने हुन्छ । आयोगको यसै आवश्यकतालाई मध्यनजर गरी भूमि व्यवस्थापन प्रशिक्षण केन्द्रले जिल्ला स्तरमा रहेका जिल्ला कार्य समितिका पदाधिकारीहरुलाई आयोगको काम, कर्तव्य र अधिकार साथै सोको कार्यबिधि बारे जानकारी गराउन यो तालिम संचालन गरेको हो ।

उद्देश्य

यस तालिमको प्रमुख उद्देश्य तालीमका सहभागीहरूलाई तालीम पश्चात देहायका काम गर्न सक्षम तुल्याउने रहेकोछः

- आयोगको उद्देश्य र कार्यप्रक्रियाका साथै भूमि सम्बन्धी कानुनबारे आधारभूत जानकारी हासिल गर्ने
- नवीनतम प्रबिधिको प्रयोग गरी अनौपचारिक भूसम्बन्धको नक्शाङ्कन बारे जानकारी गराउने आयोगबाट तोकिए बमोजिमका अन्य लगत तथा विवरण संकलन गर्ने कार्य प्रक्रिया बारे छलफल गर्ने
- आयोगबाट हुने कामकार्बाही सम्बन्धमा सामुहिक छलफल गर्ने

लक्षित समूह: भूमि समस्या समाधान आयोग जिल्ला कार्यसमितिका पदाधिकारीहरु

तालीम अवधि: ३ दिन (आवासीय)

तालीम सेसनः १२ सेसन

तालीम विधिः सैद्धान्तिक कक्षा, सामुहिक छलफल वा कार्यशाला

विषयवस्तुहरु [१२ Sessions]

1 **संविधान, ऐन, नियम, र भूमि समस्या समाधान आयोग गठन आदेशमा अनौपचारिक भू-सम्बन्ध सम्बन्धी व्यवस्था**

2 **भूमिहिन दलित, भूमिहिन सुकुम्वासी तथा अव्यवस्थित वसोवासीको वर्गिकरण बिधि**

3 नाप नक्सा बिधि, प्रक्रिया, निर्णय प्रस्ताव तयार गर्ने र निर्णय प्रक्रिया तथा नक्सा श्रेस्ता प्रमाणिकरण र हस्तान्तरणबिधि।

4 **Cadastral mapping using Satellite Image**

5 बिगतका आयोग, समिति तथा कार्यदलका बाँकी कार्यहरु सम्मपन्न गर्ने कार्यबिधि

6 कार्यशाला वा समसमायीक विषयमा छलफल।

Government of Nepal
Ministry of Land Management, Cooperatives and Poverty Alleviation
LAND MANAGEMENT TRAINING CENTER
Dhulikhel, Kavre

भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा सम्बन्धी मुख्य प्रशिक्षक (MToT) / प्रशिक्षक प्रशिक्षण (ToT) तालीम

Course Code: SST0428

पृष्ठभूमि

भूउपयोग नीति, २०७२ मा भएका व्यवस्थाहरू कार्यान्वयनको लागि भूउपयोग ऐन, २०७६ र भूउपयोग नियमावली, २०७९ जारी भै कार्यान्वयनमा आएको छ । उक्त कानूनी व्यवस्था अनुसार भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा र कार्यान्वयनमा तीनै तहका सरकारमा कुनै न कुनै जिम्मेवारी रहेको छ । स्थानीय तहको जिम्मेवारी सबैभन्दा महत्वपूर्ण रहेको छ । नापी विभागले भूउपयोग नक्सा डाटा तयार गरी स्थानीय तहमा हस्तान्तरण गरिसकेको छ भने भूउपयोग क्षेत्र वर्गीकरण लगायतका विषयमा प्राविधिक सहयोग आवश्यक परे नापी विभागले उपलब्ध गराउने व्यवस्था रहेको छ । यस सन्दर्भमा स्थानीय तहको माग बमोजिमको प्राविधिक सहयोग उपलब्ध गराउन र यस विषयमा माग बमोजिम तालीम संचालन गर्न पर्याप्त मात्रामा जनशक्ति आवश्यक पर्ने देखिएकोले सम्बन्धित विभागबाट उक्त प्रयोजनका लागि मनोनयन भइआउने वा आवश्यक योग्यता पुगेका जनशक्तिहरूका लागि "भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा सम्बन्धी मुख्य प्रशिक्षक (MToT) / प्रशिक्षक प्रशिक्षण (ToT) तालीम" दिन यो पाठ्यक्रम तयार गरिएको छ ।

उद्देश्य

यस तालिमको प्रमुख उद्देश्य स्थानीय तहमा भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा सम्बन्धी प्रशिक्षण दिन सक्ने जनशक्ति उत्पादन गर्नु रहेको छ ।

लक्षित समूहः

सम्बन्धित विषयमा कम्तिमा स्नातक तह वा सो सरहको शैक्षिक योग्यता भएको वा भूमि व्यवस्थापन, भूउपयोग योजना तर्जुमा सम्बन्धी क्षेत्रमा कार्यरत अधिकृतस्तरको कर्मचारी वा गैरसरकारी निकाय मार्फत भूमिको क्षेत्रमा कार्यरत कम्तिमा स्नातक तह वा सो सरहको शैक्षिक योग्यता भएको उम्मेदवार

तालीम अवधिः एक हप्ता
सत्र संख्याः २४; दैनिक चार सत्र (प्रति सत्र १ घण्टा ३० मिनेट)
तालीम विधिः सैद्धान्तिक कक्षा
- अन्तर्कृया तथा छलफल
- आवश्यकता अनुसारको प्रयोगात्मक कक्षा

तालीम स्थलः केन्द्र परिसर वा पायक पर्ने स्थानमा (प्रादेशिकस्तरमा)

विषयवस्तुहरु

Part A: सैद्धान्तिक [13 Sessions]

1 भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा सम्बन्धी सैद्धान्तिक पक्ष [2]

2 भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा सम्बन्धी मौजुदा नीतिगत तथा कानूनी व्यवस्था [2]

3 भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा सम्बन्धी अन्तर्राष्ट्रिय अभ्यास[2]

4 भूउपयोग नक्शा डाटा तयारी तथा उपलब्धता सम्बन्धी व्यवस्था [2]

5 विषयगत क्षेत्र (कृषि, सहरी विकास, वन लगायत) को भूउपयोग व्यवस्थापनको अभ्यास एवम् अनुभव बारे [3]

6 स्थानीय तह र प्रदेश तहमा भूउपयोग व्यवस्थापन सम्बन्धी अभ्यास एवम् अनुभव बारे प्रस्तुति [2]

Part B: प्रयोगात्मक [8 Sessions]

7 GIS Handling, Land Use Data Handling, updating, data disseminationsलगायत [4]

8 Real Case Study [4]

Part C: छलफल तथा अन्तर्कृया [3 Sessions]

9 भूउपयोग क्षेत्र वर्गीकरण तथा भूउपयोग योजना तर्जुमा सम्बन्धी सिकाइ सम्बन्धी अन्तर्कृया [3]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

अनौपचारिक भू-सम्बन्ध सम्बन्धी जिल्ला समितिका सदस्य सचिवहरूका लागि तालीम

Course Code: SST0419-1

पृष्ठभूमि

भूमिहीन सुकुम्बासीलाई जग्गा उपलब्ध गराउन तथा अव्यवस्थित बसोवासीलाई व्यवस्थापन गर्ने प्रयोजनका लागि भूमि सम्बन्धी ऐन, २०२१ को दफा ५२ख. को उपदफा (६) बमोजिम नेपाल सरकारबाट भूमि सम्बन्धी समस्या समाधान आयोग गठन भै आयोगले कार्य प्रारम्भ गरिसकेकोछ। आयोगको प्रमुख उद्देश्य परिपूर्तिका लागि अनौपचारिक र अव्यवस्थित रूपमा बसोवास गरिरहेका परिवारहरू र सम्बन्धित जग्गाको लगत आवश्यक पर्ने हुन्छ । गठन आदेशमा व्यवस्था भए बमोजिम तीन वर्ष अवधिको कार्यकालमा आयोगले आफ्नो सम्पूर्ण जिम्मेवारी पूरा गर्नु पर्ने भएकोले छोटो अवधिमैं देशभरबाट यस किसिमको विवरण एवम लगत संकलन गर्नुपर्ने हुन्छ। आयोगको यसै आवश्यकतालाई मध्यनजर गरी हरेक जिल्लामा आयोगका जिल्ला समितिहरू गठन भएका छन । तिनै जिल्ला समितिका सदस्य सचिवहरू (सदरमुकामस्थित नापी कार्यालयका प्रमुखहरू) का लागि "अनौपचारिक भू-सम्बन्ध नक्शांकन सम्बन्धी तालीम" संचालन गर्न यो पाठ्यक्रम तयार गरिएकोछ ।

उद्देश्य

यस तालिमको प्रमुख उद्देश्य जिल्ला समितिका सदस्य-सचिवहरुलाई कार्यसम्पादनमा सहजीकरण गराउनु हो । खासगरी देहायका कार्यहरु सम्पादन गर्न गराउन सक्नेगरी आफू सक्षम हुने वा मातहतका प्राविधिक कर्मचारीहरू परिचालन गराउने हो ।

- आयोगको उद्देश्य र कार्यप्रक्रियाका साथै आयोगको कार्यसंग सम्बन्धित कानूनी व्यवस्थाको बारेमा आवश्यक जानकारी हासिल गर्ने
- अनौपचारिक भूसम्बन्धको नक्शाङ्कनका लागि नवीनतमा प्रविधिको उपयोग गर्ने
- आयोगबाट तोकिए बमोजिमका अन्य लगत तथा विवरण संकलन बारे जानकारी गराउने
- जग्गाको लगत अभिलेखन तथा विश्लेषण प्रणाली संचालन सम्बन्धी जानकारी गराउने

लक्षित समूहः आयोगको जिल्ला समितिका सदस्य सचिवहरू अर्थात सदरमुकामस्थित नापी कार्यालयका प्रमुखहरु

तालीम अवधिः ३ दिन

सत्र संख्याः १२; दैनिक चार सत्र (प्रति सत्र १ घण्टा ३० मिनेट)

तालीम विधिः सैद्धान्तिक कक्षा

- अन्तर्कृया तथा छलफल
- आवश्यकता अनुसारको प्रयोगात्मक कक्षा

विषयवस्तुहरु

1 आयोगको परिचय; गठन आदेश, कार्यविधिहरू, अनुसूचीहरु, आयोगको काम संग सम्बन्धित विद्यमान कानूनी ब्यवस्था; आयोगको कामका लागि संस्थागत जिम्मेवारी तथा सरोकारवाला निकाय/संस्था/व्यक्तिहरू [2]

2 कर्मचारीहरुको भूमिका, दायित्व र आचार संहिता [1]

3 सहभागितामूलक नापनक्शा, लगत संकलन तथा निर्णयका विधिहरू [2]

4 आयोगले प्रयोग गर्ने बिभिन्न प्रणाली संचालन बारे

5 कार्यसम्पादनको क्रममा देखा परेका समस्याहरू र सो को समाधान बारे छलफल [3]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

भूमि प्रशासन तथा व्यवस्थापन (अधिकृत स्तर)

Course Code: SST0418-1

Introduction

Land management Training Centre, under the Ministry of Land Management, Cooperatives and Poverty Alleviation of the Government of Nepal, has the responsibility of conducting short- and long-term professional training courses in the field of Surveying and Mapping (Geomatics), Land Administration, and Land Management, among other responsibilities. Long-term trainings aim to produce human resources in the field of Surveying and Mapping, whereas the short-term training courses aim to upgrade the professional skill of Government employees in the field of their responsibilities. This course is developed as a fulfilment of Non-Gazetted Personnel working in Land Revenue Offices.

Objectives

Upon completion of this Training, the participants will be able to:

- Know the daily process of land administration
- Gain the knowledge of legal provisions regarding land administration.

Approach of Instruction: Lecture, Group Discussion, Presentation

Duration of the Course: 1 Week

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 24 Sessions (19 Theoretical Sessions and 6 Case Study)

Evaluation Criteria:

Evaluation of this Module is conducted based on:

- Attendance Presentation
- Practice Session

Attendance Requirement:

Less than 90% attendance will disqualify the candidate for the completion of the training.

Course Contents

Part A: Theoretical [18 Sessions]

1 रजिष्ट्रेशन सम्बन्धी[2]

1.1 रजिष्ट्रेशन गर्नुपर्ने लिखतको बारेमा जानकारी दिने

1.2 संलग्न गर्नुपर्ने प्रमाणको जानकारी गराउने

1.3 डोर तथा अधिकृतवारेशबाट लिखत पारित गराउने

1.4 नाबालक तथा बृद्धको नाउँबाट लिखत पारित

1.5 अदालतको फैसला बमोजिम दाखिल खारेज

1.6 गुठी/निजीगुठी समेतको लिखत पारित

1.7 संघसंस्थाको नाउँको लिखत पारित

1.8 सगोलनामा वा सगोलको जग्गा पारित

1.9 घरको तला वा खण्डे जग्गाको लिखत पारित

1.10 मोही लागेको घर / जग्गाको लिखत पारित

1.11 नगर विकास समिति / आयोगहरुबाट वितरित जग्गाको हक हस्तान्तरण

2 जग्गा दर्ता सम्बन्धी [2]

2.1 साविक लगत-विर्ता, रैकर र अठसट्टा

2.2 २ नं र ७ नं फाँटबारी

2.3 फिल्डबुक - दर्ता गर्न मिल्ने उल्लेख भएको

2.4 फिल्डबुकको व्यहोराको जानकारी,

2.5 फैसला बमोजिम जग्गा दर्ता

2.6 उखडा, आँकडा, विरौटी र कोदाले जग्गा दर्ता,

2.7 रैकर, गुठी विर्ता जग्गा दर्ता

2.8 सरकारी निर्णय वा आयोग तथा समितिको निर्णयानुसार जग्गा दर्ता, निर्णयपर्चा, राय किताब

2.9 नापी कार्यालयलाई जनाउ र राजश्व असुली

2.10 जग्गा दर्ता सम्बन्धी अन्य विषयहरुको जानकारी

3 जग्गा प्रशासन सम्बन्धी [1]

3.1 नामसारी सम्बन्धी-नामसारी गर्ने कानून बमोजिमका हकदारहरुको पहिचान, आवश्यक प्रमाण

3.2 दाखिल खारेज सम्बन्धी-बेजिल्ला वा बेइलाकाबाट पारित, शेषपछिको बकसपत्र, हालैको बकसपत्र,अंशबण्डा ३.३ बमोजिमको जग्गा दाखिल खारेज, भूमिसुधारको निर्णयानुसारको दाखिल खारेज, फैसला वा निर्णयबोमोजिमको ३.४ दाखिल खारेज, लगतकट्टा, अधिग्रहण वा लिलाम बमोजिमको दाखिल खारेज र अन्य प्रकारको दाखिलखारेजहरु

3.3 संशोधन - जग्गाधनीको नामथर, वतन, बाबु, बाजे, पति, ससुरा फरक परेमा संशोधन

3.4 जग्गा सम्बन्धी विवरण कि.नं. किसिम, क्षेत्रफल, संशोधन

3.5 जालसाजी र किर्ते

3.6 कानून बमोजिमका अन्य संशोधन

4 जग्गाको न्यूनतम मूल्यांकन सम्बन्धी [1]

4.1 जग्गा मूल्यांकन

4.2 जग्गा मूल्यांकनका सैद्धान्तिक व्यवस्था र प्रक्रिया

4.3 न्यूनतम मूल्यांकन सम्बन्धी व्यवस्था

4.4 मूल्यांकनमा अपनाउनु पर्ने सजगताका विषयहरु

5 गुठी सम्बन्धी [2]

5.1 राजगुठी, छुटगुठी, रैतानगुठी, निजीगुठी लगायत सबै प्रकारका गुठी जग्गाहरु

5.2 गुठी जग्गामा मोही कायम र मोही निष्कासन सम्बन्धी

5.3 गुठी तैनाथी र अधिनस्थ जग्गा

5.4 गुठी जग्गाको मालपोत, राजश्व, नगद वा जिन्सी

5.5 गुठी जग्गाको सट्टापट्टा वा अधिग्रहण र रैतानी

5.6 गुठी जग्गाको प्रशासन र व्यवस्थापन

5.7 गुठी जग्गा लोप हुने अवस्थाको समस्या

5.8 गुठी जग्गाको अभिलेख र परिचालन,

5.9 गुठी जग्गाको राजस्व असुलीमा देखिएका समस्याहरु,

5.10 कुत र बाली बुझाउने विषयको समस्या,

5.11 गुठी जग्गामा मोही कायम गर्ने र हटाउने विषयको समस्या,

5.12 पूजा, पर्व चलाउने पुरानो दरवन्दीको समस्या,

5.13 गुठी जग्गाको प्रशासन र व्यवस्थापनको समस्या र उपर्युक्त समस्याहरुको समाधानका कानूनी र व्यवहारीक उपायहरु

5.14 गुठी जग्गा सम्बन्धी अन्य व्यवस्था

6 भूमिसुधार सम्बन्धी [2]

6.1 भूमिसुधारको सैद्धान्तिक, कानूनी तथा व्यवहारिक पक्षहरु

6.2 विभिन्न किसिमका फाँटबारीहरु

6.3 मोही बाँडफाँड, मोहीयानी हकको संरक्षण

6.4 मोही लगत तथा मोही निष्कासन

6.5 मोही कायम, क्षतिपूर्ति, भूमिसुधार सम्बन्धी अन्य विविध विषयहरु

6.6 मोहीयानी हक र द्वैध स्वामित्त्वको अन्त्य

6.7 जग्गाको हदबन्दी

6.8 जग्गा बाँडफाँडमा देखिएका समस्याहरु र सामाधानहरु

7 रीट, मुद्दा र हकसाफी सम्बन्धी [2]

7.1 हकसाफीको हकदैया हुन सक्ने अवस्थाहरुको ज्ञान

7.2 फिराद पत्र लेखन तथा अदालतको दर्ता प्रकृया

7.3 हकसाफीको लागि समावेश हुनु पर्ने प्रमाण र अवस्था

7.4 सन्धीसर्पनको अर्थ र प्रयोग

7.5 मुद्दाको तारेख र वारेसको जानकारी,निर्णय र पुनरावेदन

7.6 कार्यालयको पक्ष वा विपक्षमा हुने मुद्दाहरु

7.7 लिखित जवाफ, हदम्याद र म्याद थप

7.8 मुद्दा सम्बन्धी अन्य विषयहरु

8 प्रभावकारी सेवा प्रवाहका लागि अन्य निकायहरुसँग सहकार्य [1]

8.1 नापी कार्यालय, स्थानीय तह, जिल्ला प्रशासन कार्यालय, सरकारी वकिलको कार्यालय, जिल्ला/ उच्च अदालत, बैंक तथा वित्तिय संस्था, कोष तथा लेखा नियन्त्रकको कार्यालय, आन्तरिक राजश्व कार्यालय, प्रदेशस्तरिय निकायहरु, आदि

9 राजश्व तथा धरौटी [1]

9.1 रजिष्ट्रेशन शुल्क, दस्तुर

9.2 पुँजीगत लाभ कर

9.3 धरौटी

9.4 धरौटी राख्ने र फिर्ता पाउने अवस्था

10 श्रेस्ता अद्यावधिक र प्राविधिक सहयोग [1]

10.1 पुर्जा प्राप्त गरेको जग्गा र प्राप्त नगरेको जग्गाको श्रेस्ता अद्यावधिक

10.2 रोक्का रहेको जग्गाको श्रेस्ता अद्यावधिक

10.3 ब्लकमा नापी भएको जग्गाको श्रेस्ता अद्यावधिक

10.4 नाप नक्सा, नभएको जग्गाको अद्यावधिक

10.5 सिमाना परिवर्तन भएको जग्गाको अद्यावधिक

10.6 ठाउँसारी वा आकार प्रकारको फरक भएको जग्गाको अद्यावधिक

10.7 हालसाविक

10.8 साविकमा दर्ता बाँकी रहेको तर पुनः नापीमा श्रेस्ता प्रमाणित भएको जग्गाको अद्यावधिक

10.9 साविकको कुलो बाटो हाल पुर्जा कायम भएको जग्गाको श्रेस्ता अद्यावधिक

10.10 साविकको दर्ता प्रमाणित जग्गा हाल सरकारी वा सार्वजनिक प्रकृतिको जग्गाको श्रेस्ता अद्यावधिक

10.11 तेरीज/कित्ता श्रेस्तामा नचढेको जग्गाको श्रेस्ता अद्यावधिक

11 मोठ, रोक्का र तामेली व्यवस्थापन [1]

11.1 कानून बमोजिम लेखी आएको जग्गा रोक्का राख्ने

11.2 दोहोरो रोक्का, अस्पष्ट आदेशको रोक्का, गोश्वारा रोक्का, कार्यालय आफैले राख्ने रोक्का

11.3 व्यक्ति विशेषको अनुरोधमा राख्ने रोक्का

11.4 धितो वन्दकी लिखत पारित वा पत्रबाट गरिने रोक्का

11.5 रोक्का, फुकुवा र रोक्का दस्तुर

11.6 लिखत बाइन्डिङ्ग र फाइल पञ्जिका

11.7 रोक्का सम्बन्धी अन्य विभिन्न व्यवस्थालिखत तामेल

11.8 मिसिल तामेली

11.9 दर्ता किताब

11.10 लिखत कट्टा

11.11 प्रतिलिपी, लिखत उतार

11.12 तामेलीको संरक्षण र व्यवस्थापन

11.13 मोठ श्रेस्ता,

11.14 मोठ वाइन्डिङ्ग, मोठ पंजिका

11.15 जीर्ण श्रेस्ता वा श्रेस्ता थप

11.16 एकल वा बहुल जग्गाधनी र खण्डे जग्गा

11.17 दर्ता प्रमाणित वा दर्ता बाँकी श्रेस्ता

11.18 निजीगुठी, मोही हकहिस्सा जानिएको मोठ श्रेस्ता

11.19 प्रमाण संकेत वा कैफियत व्यहोरा

11.20 तीनपुस्ता प्रमाणित वा फोटो प्रमाणित

11.21 साविक र पुनः नापीको श्रेस्ता

11.22 लगत कट्टा, श्रेस्ता उतार,नक्कल

11.23 श्रेस्ता प्रमाणित र दाखिला टिपोट

12 सरकारी तथा सार्वजनिक जग्गाको संरक्षण [1]

12.1 श्रेस्ता संरक्षणको लागि मालपोत कार्यालयको जिम्मेवारी दायित्व

12.2 नापी कार्यालयको जिम्मेवारी र दायित्व

12.3 स्थानीय प्रशासनको जिम्मेवारी र दायित्व

12.4 स्थानीय तहको जिम्मेवारी र दायित्व

12.5 नागरिकको जिम्मेवारी र दायित्व

12.6 सरकारको जिम्मेवारी र दायित्व

12.7 अभिलेख व्यवस्थापन

13 नाप नक्सा सम्बन्धी नयाँ प्रविधी एवं व्यवहारिक ज्ञान [3]

13.1 ग्राफिकल एवं डिजिटल कित्तानापी

13.2 भूमि व्यवस्थापनमा भू-सूचना प्रणालीको भूमिका

13.3 नक्सा अध्ययन, कित्ताको पहिचान, क्षेत्रफल संगणना

13.4 फिल्ड कार्य सम्बन्धी जानकारी

14 LRIMS/PAM/DMS सम्बन्धी सैद्दान्तिक तथा प्रयोगात्मक कक्षा [4 Sessions]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

भूमि साक्षरता कार्यक्रम

Course Code: STT0430

पृष्ठभूमि

मानवजाति र भूमि बीच अन्योन्याश्रित सम्बन्ध रहेको छ । नेपाली समाजमा भूमिलाई महत्वपूर्ण अचल सम्पत्तिको रुपमा लिने गरिएको पाइन्छ । हरेक व्यक्ति कुनै न कुनै रूपमा जग्गा वा भूमिसंग जोडिएको हुन्छ । भूमि सम्बन्धी सेवा लिने विधि एवम् प्रकृया, कानूनी व्यवस्था, अधिकार लगायतका विषयमा जानकारीको अभावमा समुदायमा बिभिन्न व्यक्तिहरूले बिभिन्न प्रकृतिका समस्याहरू बेहोर्नु परेको पाइन्छ । यी समस्याहरु निराकरणका लागि समुदायस्तरमा भूमिको साक्षरता हुनु आवश्यक देखिएकोले सो प्रयोजनका लागि प्रशिक्षक तयार गर्न "भूमि साक्षरता कार्यक्रम" को पाठ्यक्रम तयार गरिएको छ ।

उद्देश्य

प्रमुख उद्देश्यः समुदायस्तरमा भूमि सम्बन्धी (भूमि अधिकार, स्वामित्व, उपयोग) साक्षरता अभिवृद्धि गर्ने गरी प्रशिक्षकहरू तयार गर्ने।

- भूमि सम्बन्धी विद्यमान कानूनी प्रावधान, नीतिहरू एवम् प्रशासनिक व्यवस्थाको बारेमा जानकारी गराउने
- भूमि सम्बन्धी विषयमा हुने निर्णय प्रकृया तथा संचालनमा रहेका कार्यक्रमहरूमा अर्थपूर्ण सहभागिता जनाउन सक्नेगरी सक्षम तुल्याउने
- भूमि सम्बन्धी व्यवहारिक सवाल, सामुदायिक भूपरिवेष वा भूसम्बन्ध का बारेमा जानकार तुल्याउने
- नागरिकहरूलाई मध्यस्तकर्ताको सहयोग बिना भूमि सम्बन्धी सेवा लिन लिनसक्ने गरी सक्षम तुल्याउने

लक्षित समूहः आम नागरिकका लागि भूमि साक्षरता अभिवृद्धि गर्नसक्ने क्षमता भएको, प्रशिक्षण केन्द्र र सहकार्य गर्ने संस्थाले छनौट गरेका व्यक्ति

अवधिः १ हप्ता

सत्र संख्याः १३ (प्रति सत्र १:३० घण्टा)

विधिः

- सैद्धान्तिक कक्षा
- अन्तर्कृया तथा छलफल
- सहभागितामूलक श्रव्य-दृश्य, पोष्टर, ब्रोसर, नाटक मञ्चन
- समुदाय भ्रमण

स्थानः प्रशिक्षण केन्द्र वा अन्य पायक पर्ने स्थानमा

सहभागी संख्याः २५

मोडालिटिः सरकारी निकाय वा राष्ट्रिय तथा अन्तर्राष्ट्रिय गैरसरकारी संस्थाहरूसंग लागत साझेदारी सहितको सहकार्य गरी संचालन गर्ने

विषयवस्तुहरु

1 भूमि सम्बन्धी परिवेश नक्शाङ्कन गर्ने विधि

2 भूमि सम्बन्धी आधारभूत जानकारीः जग्गा, भूमि, भूसम्बन्ध, भूमि अधिकार, भूमिको स्वामित्व, स्वामित्व हस्तान्तरणको प्रकृया, ऐलानी जग्गाको हस्तान्तरण, घरायसी लिखतको कानूनी हैसियत सम्बन्धी कानूनी व्यवस्था

3 जग्गा दर्ता सम्बन्धी व्यवस्थाः

3.1 दर्ता भएको जग्गा, बेदर्ता जग्गा (छुट दर्ता, बहाल बिटौरी, जिरायत, गुठी, स्ववासी बेनिस्सा, मोही, उखडा, झोरा, उपयोग गर्न नसकिएको जग्गा)

4 नागरीकले ध्यान दिनुपर्ने कुराहरूः

4.1 आफ्नो जग्गालाई सुरक्षित राख्ने तरिका; नक्शा, पूर्जा, लिखतको सुरक्षा गर्ने तरिका,

4.2 जग्गा खरीद गर्दा ध्यानदिनुपर्ने कुराहरु

5 रजिष्ट्रेसन दस्तुर, मालपोतका विषयमा सामान्य जानकारी र ध्यान दिनुपर्ने कुराहरू

6 उपयुक्त (सुरक्षित र पर्याप्त) आवासको हक

7 सरकारी, सार्वजनीक, सामुदायिक, गुठी जग्गाको संरक्षण र उपयोग

8 भूमिहीन दलित, भूमिहीन सुकुम्बासी, अव्यवस्थित बसोवासी (राष्ट्रिय भूमि आयोगले गर्ने काम) व्यवस्थापन

9 स्थानीय तहसंगको सरोकारको विषयहरू

9.1 घरबाटो प्रमाणित, सर्जमिन मुचुल्कामा सहभागि हुँदा ध्यानदिनु पर्ने कुराहरू

10 भूमिमा महिलाको अधिकार र स्वामित्व, संयुक्त पूर्जाको अवधारणा, यसको महत्व

11 जग्गाको नापजाँच सम्बन्धी सामान्य जानकारी

11.1 नक्शा, फिल्डबुक, मोठ श्रेस्ता, अस्थायी पूर्जा, निस्सा, आदि

11.2 क्षेत्रफलको हिसाब, नापजाँच सम्बन्धी सामान्य जानकारी

11.3 नापनक्शा सम्बन्धी मोबाइल एप्लिकेसन

12 भूमि सम्बन्धी सेवा

12.1 सम्पर्क गर्नुपर्ने निकायहरू

12.2 आवश्यक पर्ने कागजातहरु

12.3 शूल्क, दस्तुर आदि

12.4 सम्पर्क गर्नुपर्ने कर्मचारीहरू

12.5 भूमि सम्बन्धी सेवाका लागि जानकारी लिने तरिका; कार्यालयमा रहेको नागरिक बडापत्रको उपयोगिता

12.6 कार्यालयका गुनासो सुन्ने अधिकारी, सूचना अधिकारी, कार्यालयहरूको भूमिका

12.7 स्थानीय तहमा न्यायिक समितिबाट समाधान हुनसक्ने मुद्दाहरू

13 मुलुकी देवानी संहितामा भूमि र सम्पत्ति सम्बन्धी विषय

14 भूउपयोग व्यवस्थापन

15 सम्बन्धित समुदायले भोगेका समस्या समाधानका लागि सरोकारवाला निकायहरूको भूमिकाबारे छलफल, अन्तरक्रिया

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

अदालतमा कार्यरत कर्मचारीहरुका लागि नापनक्सा तथा जग्गा प्रशासन सम्बन्धी

Course Code: STT0431

Introduction

This course is designed to provide participants with comprehensive understanding of surveying and mapping focusing on cadastral surveying. The program will highlight current land administration system. It will brighten the intricate interplay between Land Administration and the judicial decision-making process.

Objectives

Upon completion of this course, participants will be able to;

- To acquire knowledge on various aspect of land administration system of Nepal.
- To achieve knowledge on cadastre and cadastral mapping system of Nepal.
- To know the knowledge on cadastral data collection methods.
- To know the knowledge of dispute settlement regarding land.
- To achieve the knowledge of basic the field demarcation.

Target group: Technical and non-technical personnel working in court

Number of Participants: 20

Approach of Instruction: Lecture, Group Discussion, Outdoor practical

Duration of Training: 1 week

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 24 sessions

Evaluation Criteria:

Evaluation of the training is conducted based on:

- Attendance

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Content

Part A: Theory [15]

1 नेपालको जग्गा प्रशासन प्रणाली [1]

2 कित्तानापी नक्सा सम्बन्धी जानकारी [2]

2.1 कित्तानापी नक्सा, दुरी अंकित, माननाप, क्षेत्रफल संगणा, छुटफरक, आदि।

3 नापी तथा भूमिसुधार तथा मालपोत कार्यालयहरुबाट प्रवाह हुने सेवाहरुको जानकारी [1]

3.1 नक्सा प्रिन्ट, फिल्डबुक उतार, प्लट रजिष्टर उतार, कित्ताकाट, टायल चेक, कित्ता एकिकरण र फिल्ड रेखांकन, नक्सा संशोधन।

3.2 छुट जग्गा दर्ता स्ववासी , बेनिस्सा जग्गा दर्ता।

3.3 श्रेष्ता, दा. खा. , फुकुवा, रोक्का, प्रमाण पूर्जा, ध. ज., नामसारी तथा हकहस्तान्तरण अन्य व्यवस्थाहरु।

4 जग्गा दर्तामा र यसमा देखिएका समस्याहरु [2]

5 पुनः नापी, पुरानो नापी र पुन नापी पछिको जग्गा दर्ता [2]

6 गुठि जग्गा सम्बन्धी व्यवस्था [1]

7 भूमि आयोगबाट हुने कामहरु [1]

8 जग्गा खिचोलाका विषय नरम-करमका व्यवहारिक पक्षहरु, नक्सा मुचुल्का, बण्डा मुचुल्का लेखन तथा फैसला कार्यान्वयनका विषयहरु [2]

9 जग्गा प्रशासनसँग सम्बन्धित कानूनी व्यवस्थाहरु [2]

9.1 नेपालको संविधान

9.2 जग्गा (नापजाँच) ऐन, २०१९

9.3 जग्गा (नापजाँच) नियमावली, २०५८

9.4 जग्गा नाप जाँच तथा नक्सा श्रेस्ता अद्यावधिक सम्बन्धी निर्देशिका, २०७३

9.5 मालपोत ऐन, २०३४

9.6 भूमि सम्बन्धी ऐन, २०२१

9.7 भू-उपयोग ऐन, २०७६

9.8 भू-उपयोग नियमावली, २०७९

9.9 डिजिटल कित्तानापीको SOP

9.10 स्थानिय सरकार संचालन तथा व्यवस्थापन ऐन, २०७४

10 सरकारी सार्वजनिक जग्गाको उपयोग र संरक्षण [1]

Part B: Demo [9]

11 नक्सा अध्धयन र स्थलगत अभ्यास

12 Application of Merokitta

13 Mobile application like mapsme, OSM, SW maps, Google map, Handheld GPS

14 Location based services like Pathao, indrive

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

कित्तानापी नक्साङ्कन तथा जग्गा दर्ता सम्बन्धी तालीम

Course Code: SST0432

पृष्ठभूमि

यस तालीमको मुख्य उद्देश्य कित्तानापी नक्साको नक्साङ्कन तथा जग्गा दर्ता प्रणालीको बारेमा जानकारी दिनको लागि संचालन गरिएको हो ।यस अन्तर्गत प्रशिक्षार्थिहरुलाई छुट जग्गा दर्ता सम्बधि कानुनी व्यवस्था र छुट जग्गा दर्ता प्रणालीको बारेमा बिस्तृत जानकारी दिन रहेको छ ।

उद्देश्य

यस तालिमको प्रमुख उद्देश्य तालीमका सहभागीहरूलाई तालीम पश्चात देहायका काम गर्न सक्षम तुल्याउने रहेकोछः

- कित्तानापी नापनक्साको बारे जानकारी दिने
- छुट जग्गा दर्ता प्रक्रिया र कानुनबारे आधारभूत जानकारी हासिल गर्ने
- गुठी, विविन्न भूमि सम्बन्धित आयोग को जग्गा दर्ता सम्बन्धी कानुनी व्यवस्था को जानकारी दिने

लक्षित समूहः नापी कार्यालयमा कार्यरत टोली प्रमुखहरु

तालीम विधिः सैद्धान्तिक कक्षा, सामुहिक छलफल वा कार्यशाला

प्रशिक्षार्थि संख्या : २०

तालीम अवधिः १ हप्ता

जम्मा सत्र प्रति दिनः ४ (१ घण्टा ३० मिनेट)

जम्मा सत्रः २४ सत्र

हाजिरी आवश्यकताः

कम्तीमा जम्मा सत्रको ९०% हाजिरी हुनुपर्ने (९०% भन्दा कम हाजिर हुने प्रशिक्षार्थिलाई प्रमाणपत्र प्रदान गरिने छैन)

Course Contents

PART A: Theory [12]

1 कित्तानापीको परिचय [1]

1.1 Introduction to Cadastre,

1.2 Concept of Digital Cadastre

2 ऐन कानुन [2]

2.1 जग्गा (नापजाचँ) ऐन, २०१९ जग्गा नापजाचँ नियमावली, २०५८

2.2 नाप नक्सा तथा श्रेस्ता अधावधिक सम्बन्धी निर्देशिका, २०७३

2.3 डिजिटल कित्तानापी (SOP)

2.4 जग्गा प्रशासन निर्देशिका ,२०५८

3 छुट जग्गा दर्ता [2]

3.1 जग्गा दर्ता गर्दा हेर्नु पर्ने प्रमाणहरु

3.2 जग्गा दर्ता गर्दा आउने कानुनी र प्राविधिक समस्याहरु

4 Digital Cadastre को प्रक्रिया [2]

5 Cadastral Documentation [1]

6 गुठि सम्बन्धी व्यवस्था[1]

7 भूमि आयोग सम्बन्धी कामकाजहरु[1]

8 जग्गा दर्ता सम्बन्धी [3]

8.1 जग्गा दर्ताका सिद्धान्त: private conveyancing, deed and title

8.2 साबिक लगत-विर्ता, रैकर र अठसट्टा

8.3 २ नं र ७ नं फाँटबारी

8.4 फिल्डबुक- दर्ता गर्न मिल्ने उल्लेख भएको

8.5 फिल्डबुकको व्यहोराको जानकारी

8.6 फैसला बमोजिम जग्गा दर्ता

8.7 उखडा, आँकडा, विरौटी र कोदाले जग्गा दर्ता

8.8 रैकर, गुठी विर्ता जग्गा दर्ता

8.9 पुन नापी पछिको जग्गा दर्ता, नक्सा संशोधन ।

8.10 गाउँ ब्लक, छुट जग्गा दर्ता, स्ववासी/बेनिस्सा जग्गा दर्ता ।

8.11 सरकारी निर्णय वा आयोग तथा समितिको निर्णयानुसार जग्गा दर्ता, निर्णयपर्चा, राय किताब

8.12 नापी कार्यालयलाई जनाउ र राजश्व असुली

8.13 जग्गा दर्ता सम्बन्धी अन्य विषयहरुको जानकारी

PART B: Practical [8]

9 Digital Cadastral Map generation using total station

10 Parcel editor

11 Cadastral Map and documentation preparation

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Cadastral Survey using GNSS and UAV

Course Code: STT0433

Introduction

This specialized course is designed to provide participants with comprehensive expertise in cadastral survey using digital technology GNSS and UAV. It balances theoretical foundations with practical experience by exploring digital interfaces, various tools, and important extensions. The training includes hands-on lab exercises that guide participants through crucial tasks like handling UAV and GNSS and processing.

Objectives

Upon completion of this course, participants will be able to;

- Acquire basic knowledge on UAV and GNSS,
- To process GNSS and UAV data
- Prepare and develop digital cadastral database

Target group: Open

Number of Participants: 20

Approach of Instruction: Lecture, Lab Demonstration, Field work

Duration of Training: 9 days

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 36 sessions

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Content

Part A: Theory [10 sessions]

1 Introduction [2]

1.1 Concept of Cadastre

1.2 Principle of Cadastre

1.3 Cadastral Survey and its importance

1.4 Comparison of Modern Cadastral Survey with Traditional Cadastral Survey

2 Laws and Acts [2]

2.1 जग्गा नापजाँच ऐन २०१९ र नियमावली २०५८

2.2 जग्गा नाप जाँच तथा नक्शा श्रेस्ता अद्यावधिक सम्वन्धी निर्देशिका २०७३

2.3 Standard Operation of Procedure (SOP)

2.4 हवाई सर्वेक्षण अनुमति कार्यविधि, २०७९

3 GNSS [3]

- 3.1 Introduction, History
- 3.2 Principle, System, Components
- 3.3 Static, and RTK Surveying

4 UAV [3]

- 4.1 Introduction, Principle, Types and Application
- 4.2 Flight Planning, Regulation and Safety Precautions
- 4.3 Image Processing
- 4.4 Orthophoto Generation

PART B: Practical [26]

5 Flight Planning [4]

6 GNSS static and rkt surveying data collection and processing [6]

7 Data Download, Processing and Orthophoto generation [8]

8 Preparing cadastral Database [4]

9 Field Verification [2]

10 Documentation [2]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Lidar Training: LiDAR Data प्रयोग तथा प्रशोधन सम्बन्धी तालीम

Course Code: STT0434

Introduction

This specialized course is carefully designed to provide participants with comprehensive expertise in Lidar Remote Sensing. It balances theoretical foundations with practical experience by exploring Lidar principles, tools, technology, and important extensions. The training includes hands-on lab exercises that guide participants through crucial tasks like downloading and visualizing data, filtering, DSM and DTM generation, and feature extraction.

Objectives

Upon completion of this course, participants will be able to;

- To acquire basic knowledge of LiDAR data and its applications.
- To capture LiDAR data, process point clouds, and produce orthophotos.
- To analyze different terrain models

Target group: Technical and non-technical personnel working in court

Number of Participants: 20

Approach of Instruction: Lecture, Group Discussion, Out-door practical

Duration of Training: 1 week

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 24 sessions

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Content

Part A: Theory [6 sessions]

1 Introduction to Lidar [2]

1.1 Introduction and Development

1.2 Principle, Types

1.3 Use & Application

2 Lidar Components [1]

2.1 Sensors, Components and its function

2.2 Data Storage & Management System

3 Acquisition & Processing [3]

3.1 Planning a LIDAR survey

3.2 Calibration & Quality Control

3.3 Methods of LIDAR data acquisition

3.4 Processing: Filtering, Elimination

3.5 Digital Surface Model (DSM) and Digital Terrain Model (DTM) generation

3.6 Analysis, Feature Extraction

3.7 Introduction to orthophoto production

Part B: Demonstration [18 Session]

4 LiDAR Handling and Its accessories [2]

5 Overview and Introduction of software [1]

6 Ground Control Points [1]

7 Lidar Data Capture [4]

8 Download & data Processing [7]

9 Output & Feature Extraction [3]

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

नक्शा अध्ययन सम्बन्धी आधारभूत तालीम (जिल्ला स्थित सरकारी कार्यालयका कर्मचारी)

Course Code: STT0435

Introduction

This specialized course is carefully designed to provide participants with comprehensive expertise in map reading and the map-making process. Understanding maps helps people grasp spatial relationships between different places. Map reading skills have practical applications in various situations, such as planning trips, navigating unfamiliar areas, and more. This course will equip participants with general knowledge and practical skills to effectively read and create maps.

Objectives

Upon completion of this course, participants will be able to;

- To learn general knowledge on map reading
- To know the list of services provided by mapping institutions
- To analyze different Location based services

Target group: Government Employee

Number of Participants: Open

Approach of Instruction: Lecture, Indoor Demonstration classes,

Duration of Training: 1 day

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 4 sessions

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Contents

Part A: Theory [3 Session]

1 Introduction [1]

1.1 Overview of LMTC

1.2 Definition of Map

1.3 Map type, Elements of Map

1.4 Classification and its application

2 Map reading technique [1]

2.1 Scale, Measurement, Area calculation

2.2 Geographical names

3 Digital Map [1]

3.1 Open-source map, Use and application

3.2 Applications like Google map, SW maps, Bing map, Mapsme

3.3 Download and use

4 भूमि प्रशासन सम्बन्धी सेवा प्रदायक संस्थाहरुको बारे जानकारी

Part B: Demonstration [1 Session]

5 Map Reading

6 Distance and Scale

7 Location Sharing (WhatsApp, Facebook)

8 Merokitta

9 Location based services like pathao, indrive etc

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

नक्सा अध्ययन सम्बन्धी आधारभुत तालीम (विध्यालय स्तरमा)

Course Code: 0436

Introduction

This course is signed to help students develop spatial thinking skills, improves their ability to visualize information, make connections, and think critically and engage with the world beyond their immediate surroundings. Knowing how to read a map gives students a sense of self-confidence. This course is designed to provide basic information on map and map reading ensuring participants can effectively communicate and use maps their insights for daily use. This course will highlight map making procedure and exploring interfaces of different mapping software.

Objectives

Upon completion of this course, participants will be able to;

- To provide basic knowledge on map elements.
- To provide knowledge on map making procedures and map reading processes.

Target group: School level students

Number of Participants: Open

Approach of Instruction: Presentation and demonstrations

Duration of Training: 1 day

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 4 sessions

Course Content

Part A: Theory [15]

1 Introduction and Definition [1]

1.1 Basic overview (Introduction to Maps)

1.2 Types of Map: topographical & cadastral map (Cadastral parcel, area calculation method)

1.3 Uses of Map

2 Map Reading [1]

2.1 Scale, Legend, Elements

2.2 Basic coordinate system

2.3 Geographical location

2.4 Geographical Names

3 Map making procedure [1]

3.1 Satellite image

3.2 Aerial photo

3.3 UAV

4 Institutional framework and their basic services [1]

Part B: Demo

5 Merokitta use and application

6 Area calculator, use of different mobile apps: Google map, SW maps, Bing map, Maps.me

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

Total Station Calibration

Course Code: SST_0437

Introduction

This specialized course is designed to provide participants with comprehensive expertise in total station and its calibration. Total station calibration is essential to ensure the accuracy and reliability of measurements in surveying. It balances theoretical foundations with practical experience with total station standardization and calibration. The training includes hands-on lab exercises that guide participants through crucial for making calibration of total station. The course concludes by teaching participants advanced laboratory and theoretical techniques, ensuring they can effectively communicate and use their insights for proper surveying with standardized and properly calibrated total station.

Objectives

Upon completion of this course, participants will be able to;

- Acquire basic knowledge on total station working principle and calibration
- To analyze observed data after correction

Target group: Technical employees (Amin, Surveyor, Engineer etc.)

Number of Participants: 20

Approach of Instruction: Lecture, Indoor Demonstration, Field work, Project

Duration of Training: 3 days

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 12 sessions

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Content

Part A: Theory [5 sessions]

1 Introduction [1]

- 1.1 Definition and Principle
- 1.2 Parts and Functions of Total Station
- 1.3 Parts and functions of Levelling
- 1.4 Uses and Importance

2 Observation and Measurement [1]

- 2.1 Angular and Distance Measurement
- 2.2 Error and its types

3 Calibration [2]

- 3.1 Concept
- 3.2 Standardization and Calibration
- 3.3 Calibration Techniques

PART B: Practical [7]

4 Preliminary Check [1]

- 4.1 Visual Inspection
- 4.2 Battery Check
- 4.3 Certification

5 Software and Tools [1]

- 5.1 S/W Distance
- 5.2 Collimation
- 5.3 Target Check
- 5.4 Prism Constant

6 Calibration [5]

- 6.1 Horizontal Collimation
  - 6.1.1 Target Selection
  - 6.1.2 Measure and Record
  - 6.1.3 Calculate error and adjust
- 6.2 Vertical Index
  - 6.2.1 Zero Check
  - 6.2.2 Adjust
- 6.3 Compensator Check
  - 6.3.1 Level Accuracy
  - 6.3.2 Test Stability and adjust
- 6.4 EDM Calibration
  - 6.4.1 Baseline Test
  - 6.4.2 Measure Distance and Compare
  - 6.4.3 Adjust Calibration Constant
- 6.5 Verification

6.5.1 Two face measurement
6.5.2 Laser Pointer Collimation check

Government of Nepal

Ministry of Land Management, Cooperatives and Poverty Alleviation

LAND MANAGEMENT TRAINING CENTER

Dhulikhel, Kavre

NeLIS प्रणाली सञ्चालन सम्बन्धी तालिम

Course Code: STT 0438

Introduction

This specialized course is designed to provide participants with comprehensive expertise in Operation of NeLIS software with its theoretical background and evolution. It balances theoretical foundations with practical experience by exploring digital interfaces, various tools, and features. The training includes hands-on lab exercises that guide participants through crucial tasks like handling Web and Desktop Applications.

Objectives

Upon completion of this course, participants will be able to;

- Acquire basic knowledge on Land Information System,
- To understand Nepal Land Information System and its operation
- Prepare and develop Skills on Service delivery through NeLIS software

Target group: Open

Number of Participants: 20

Approach of Instruction: Lecture, Lab Demonstration, Field work

Duration of Training: 1 week

Sessions per day: 4 Sessions (1 hour and 30 minutes each session)

Total Number of Sessions: 24 sessions

Attendance Requirement:

At least 90% (No certificate will be issued for the participant having less than 90% attendance)

Course Content

1 Introduction [2]

1.1 Concept and Principle of Cadastre

1.2 Cadastre and Land Information System

1.3 Evolution of LIS and NeLIS

2 Laws and Acts [1]

2.1 जग्गा नापजाँच ऐन,२०१९

2.2 जग्गा नापजाँच नियमावली ,२०५८

2.3 जग्गा नापजाँच तथा नक्सा स्रेस्ता अद्धावधिक सम्बन्धी निर्देशिका, २०८१

2.4 डिजिटल प्रणाली मार्फत जग्गाको नापनक्सा तथा जग्गा प्रशासन सम्बन्धी सेवा प्रवाह निर्देशिका, २०७८

3 Introduction to NeLIS [2]

3.1 NeLIS
3.2 Web Application
3.3 Desktop Application

4 NeLIS Prerequisites [3]

4.1 Prerequisites
4.2 Network Configuration
4.3 Installation of NeLIS Software

5 NeLIS Workflow and Updating of Cadastral Record [14]

5.1 Opening the Application: Web and Desktop Application
5.2 User Management and Features in Web Application
5.3 Entry in Desktop Application
5.4 Searching of Parcel
5.5 Map Print for Reference
5.6 Map Print Transaction
5.7 Update Attribute and Spatial Details
5.8 Georeferencing
5.9 Different types of Transaction in NeLIS
5.10 Creating Parcel Transaction
5.11 Different method of Parcel Fragmentation
5.12 Check and Approval in NeLIS

6 मेरो कित्ता [2]

6.1 सेवाग्राहीले निवेदन दिने प्रक्रिया
6.2 सेवा दिने प्रक्रिया