



Co-funded by the  
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## Course: **Urban Upgrading in Peri-urban Informal Settlements**

Third-year BSc. Degree programme in Urban Planning and Design

### **1. Course: Urban upgrading, regeneration and development**

This course aims to explore the issues and practical potential of socio-economic, environmental and urban upgrading framework for a specified or chosen neighborhood and to link urban upgrading, redevelopment and development at this local level to key areas of the neighborhood and the surroundings, with particular reference to urban planning and design courses.

#### **The course will:**

- Briefly review the characteristics of the neighborhood in its local and town context,
- Review the physical characteristics of the neighborhood and its surrounding neighborhoods and their strength, weakness, opportunities and threats,
- Work with local interest groups to establish aspirations, problems, needs capacities and potential for development and redevelopment,
- Prepare outline strategies and proposals for debate in the neighborhood,
- Develop a more detailed urban upgrading, regeneration, and development framework for the neighborhood supported by global comparative study.

#### **Key words**

- Urban upgrading/urban regeneration/ urban development/ development frameworks environment/sustainability.

Whilst this is a study carried out as part of an under graduate academic programme, the results will be made fully available to the city, and could form the basis for a developed briefing document for

professionals working in the public and private sectors and for funding applications to the appropriate institutions.

Similar projects have been conducted in Mekelle over the last few years; the most recent Local Development Plans (LDPs) are prepared by different consultants in different neighborhoods in conjunction with the municipality.

#### **Draft programme:**

**October 2020:** Develop questionnaire visit respective neighborhoods and collect/ observe general information historic evolution of each neighborhood and relationship with their respective neighborhoods.

**October 2020:** Team meeting and briefings, preparation of preliminary issue analysis.

**October 2020:** Presentation of preliminary issues analysis for discussion with City Officials and instructors.

**November 2020:** Revision to issues analysis, based on the discussions of identification of areas of further investigation and information required the role and characteristics of public realm in the neighborhoods.

**November 2020:** Study continues with further investigations and development of initial proposals and presentation made to instructors.

**November 2020:** Presentation of final analysis and proposal.

**December 2020:** Presentation of final analysis and proposal continues.

#### **Deliverables**

1. Well consolidated & integrated report: **30%**
2. Detail land use plan (streets with its constituent elements, squares, parks, landscape, public buildings, corners etc.) of the respective neighborhood: **20%**
3. 3D design of the neighborhood or area: **20%**
4. Animation : **10%**

## **2. Course content on Urban Upgrading in Peri-Urban Informal settlement**

### **Part one**

1.1 Module objective

1.2 Module overview

### 1.3 Module aim

## **Part two**

### 1. Case study on urban upgrading in peri-urban informal settlement (the case of Dungur, Mekelle)

### 2. General Background of the study area

#### 2.1 General Objectives

#### 2.2 Specific Objectives

#### 2.3 Scope

#### 2.4 Methods of Data Collection

### 3. Socio-Demographic Analysis

#### 3.1. Background Justification and Methodologies

##### 3.1.1. Introduction

##### 3.1.2. Background Information & Historical Review of Upgrading Project Areas

##### 3.1.3 Resources and Engagement to collect primary data

#### 3.2. Survey Findings of *Dingur* Upgrading Site

##### 3.2.1 Socio-economic and demographic characteristics

#### 3.3 Brief understanding on its tradition and social infrastructures (coverage and qualities)

#### 3.4 Communities' satisfaction and perception on social infrastructures

#### 3.5 Conclusion and Recommendations

##### 3.5.1 Conclusions

##### 3.5.2 Recommendations

### 4. Spatial Analysis

#### 4.1 Introduction

#### 4.2 Location of the upgrading project

#### 4.3 Existing spatial analysis

#### 4.4 Topography and Slope Analysis

- 4.5 Conclusion and Recommendations
  - 4.5.1 Conclusions
  - 4.5.2 Recommendations
- 5. Road and Transport System
  - 5.1 Introduction
    - 5.1.1 Background
  - 5.2 Summary of Findings
    - 5.2.1 Interview results
    - 5.2.2 Traffic and Pedestrian Counts
  - 5.3 SWOT Analysis related to the Road and Transport System
  - 5.4 Summary of Findings
- 6. Water Supply and Drainage
  - 6.1 Introduction
  - 6.2 Situation Assessment of Water Supply
    - 6.2.1 Review of Previous Studies on the Water Supply Condition
    - 6.2.2 Water Supply House-Hold Survey Analysis
  - 6.3 Assessment of Storm Water Drainage System
    - 6.3.1 Review of Previous Studies on Flooding and Storm Water Drainage
    - 6.3.2 Flooding and Storm Water Drainage Household Survey
  - 6.4 Planning for identified problems
- 7. Geology and soil conditions (landscape, ecology and environment)

**Part three: proposal**

- 1. Problem Identification and Prioritization (social inclusion)
  - 1.1 Planning approach and methodology

- 1.2 Problem Identification and Prioritization
- 2. Strategy Phase
  - 2.1 Implementation Strategy for *Dingur* Neighbourhood Upgrading
  - 2.2 Vision
  - 2.3 General Objective
  - 2.4 Specific Objectives
  - 2.5 Planning principles
  - 2.6 Conception
- 3. Upgrading Project Proposal
  - 3.1. Introduction
  - 3.2. Basic upgrading Principles
  - 3.3 Demographic output–input analysis and integration
    - 3.3.1. Population
  - 3.4. Physical and Environmental Proposals
    - 3.4.1. Summary of planning issues
    - 3.4.2. Geology and water source proposal
    - 3.4.3. Urban greenery and recreation areas proposal
    - 3.4.4. Solid waste management proposal
  - 3.5. Micro and Small Scale Enterprises Proposals on *Dingur* upgrading area
  - 3.6. Proposal for utilities (electric and telephone)
    - 3.6.1. Introduction
    - 3.6.2. Proposed energy meter (KWHM)
    - 3.6.3. Proposed transformer
    - 3.6.3. Proposed electric poles
    - 3.6.4 Standard clearances

- 3.6.5. Proposed Street Light
- 3.6.6. Proposed Telephone Network
- 3.7. Road network and Transportation proposal
  - 3.7.1. Summary of Findings
  - 3.7.2. Proposal in Structure Plan around the LDP area
  - 3.7.3. Summary of Traffic Count Results
  - 3.7.4. Road network and transport proposal
  - 3.7.5. Standard road sections
- 3.8. Proposed land use
  - 3.8.1. General framework of the concept plan development
  - 3.8.2. Existing Land use, Gap Analysis & Proposed LDP
  - 3.8.3. Land Use Allocation
  - 3.8.4. Plots and houses affected by the proposal
  - 3.8.5. Proposed Building Height Regulation
- 3.9. Upgrading project and the need for good governance
  - 3.9.1. Public Opinion on State of Governance: Survey Results
  - 3.9.10 Implementation and Timeline
- 4. Monitoring and Evaluation
  - 4.1 Monitoring and Evaluation
  - 4.2. Responsible body for Evaluation and Monitoring
  - 4.3. Evaluation and Monitoring Period
    - 4.3.1. Verification
  - 4.4. Responsibility for Modification of Plans
- 5. Conclusion
- 6. References**

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