

PROVINCIAL LAND USE PLAN OF KHYBER PAKHTUNKHWA

DISTRICT DERA ISMAIL KHAN

VOL 01: EXISTING & PROPOSED LANDUSE

**DELIVERABLE 04: DRAFT LANDUSE PLAN
REPORT**



The Urban Unit

Urban Sector Planning & Management Services Unit (Pvt.) Ltd.



TABLE OF CONTENTS

1. PROLOGUE	3
1.1 Introduction	3
1.1.1 Background	3
1.1.2 Objectives	4
1.1.3 Land Use Planning Process	4
1.1.4 Project Methodology	5
1.1.5 Project Area	5
1.2 Vision Development	6
1.2.1 Key Findings	6
1.2.2 Vision Statement.....	7
1.2.2.1 Goals	7
1.2.2.2 Objectives	7
1.3 Physical Characteristics of the District	8
1.3.1 Climate.....	8
1.3.1.1 Temperature Pattern.....	8
1.3.1.2 Rainfall.....	8
1.3.1.3 Wind-Direction	9
1.3.2 Elevation	10
1.3.3 Geology	10
1.3.4 Seismic Condition	11
1.3.5 Hydrology	12
1.3.6 Surface Water Resources.....	12
1.3.7 Water Table	13
1.4 Socio-Economic Profile	14
1.4.1 Population Distribution	14
1.4.1.1 Age and Sex-Wise Population Distribution	15
1.4.2 Population Density	16
1.4.3 Migration.....	17
1.4.3.1 Reason for migrations	18
1.4.4 Employment.....	18
1.4.5 Literacy Ratio.....	19
1.4.6 Education Attainment	20
1.5 Administrative Setup.....	21
1.6 Urbanization & Hierarchy of Human Settlements.....	23
1.6.1 Urbanization Trend in District D.I. Khan	23
1.6.2 Defining Characteristics and Scores.....	24
1.6.3 District D.I. Khan Settlement Hierarchy.....	24
1.6.4 Settlements to be Urbanized.....	25
1.6.5 Delineation of Proposed Urban Centers Planning Boundary	27

1.6.5.1	Compact Built-up Boundaries	28
1.6.5.2	Growth Direction	30
1.6.6	Proposed Planning Boundary of Urban Centers.....	37
1.6.6.1	D.I. Khan City.....	37
1.6.6.2	Panyala Urban Center.....	38
1.6.7	Rural to Urban Population Transformation.....	39
1.6.8	Population Projection.....	40
1.7	Density of Planning Boundaries.....	41
2.	EXISTING LAND USE DISTRIBUTION	43
2.1	Urban Centres	43
2.2	District Land Use Distribution	45
2.3	Tehsil Land Use Distribution	48
2.3.1	Tehsil D.I. Khan	48
2.3.2	Tehsil Paharpur	50
2.3.3	Tehsil Kulachi	52
2.3.4	Tehsil Paroa	54
2.3.5	Tehsil Panyala	56
2.3.6	Tehsil Darazinda.....	58
2.3.7	Tehsil Daraban	60
2.4	Urban Centers Land Use Distribution	62
2.4.1	D.I. Khan City Urban Center.....	62
2.4.2	Paharpur Urban Center.....	64
2.4.3	Kulachi Urban Center.....	66
2.4.4	Paroa Urban Center	68
2.4.5	Panyala Urban Center	70
2.4.6	Daraban Urban Center.....	72
2.4.7	Darazinda Urban Center	74
3.	PROPOSED LAND USE ZONING	76
3.1	Land Use Planning through Zoning.....	76
3.2	District D.I. Khan Proposed Land Use.....	76
3.3	Urban Centers	80
3.3.1	D.I. Khan City.....	80
3.3.2	Paharpur	84
3.3.3	Paroa.....	87
3.3.4	Kulachi.....	90
3.3.5	Panyala	93
3.3.6	Daraban	96
3.3.7	Darazinda	99
3.4	Comparative Review of D.I. Khan City Master Plan (2024–2042) and District Land Use Plan.....	102
3.4.1	Urban Growth Direction and Boundary Delineation.....	102

3.4.2	Residential Zones	102
3.4.3	Agricultural Zones	102
3.4.4	Institutional Zones	103
3.4.5	Recreational Zones	103
3.4.6	Commercial Zones	103
3.4.7	Industrial Zone	103
3.4.8	Mixed-Use Zones	103
3.4.9	Conclusion	103
4.	Legal Framework for Implementation of District Land Use Plans	104
4.1	Administrative and Institutional Framework	104
4.1.1	Provincial Tier - Policy and Regulatory Leadership	104
4.1.1.1	Provincial Land-Use and Building Control Council	104
4.1.1.2	Provincial Land-Use and Building Control Authority.....	105
4.1.1.3	Planning and Development Department	105
4.1.1.4	Local Government, Elections and Rural Development Department.....	106
4.1.1.5	Local Council Board	108
4.1.2	District Tier – Plan Preparation, Coordination, and Enforcement.....	109
4.1.2.1	District Land-Use Planning and Management Committee	109
4.1.3	Local Planning Institutions – Implementation and Service Delivery	109
4.1.3.1	Dera Ismail Khan Urban Area Development Authority.....	110
4.1.3.2	Tehsil Municipal Administration	110
4.1.3.3	Local Planning and Enforcement Unit (LP&EU).....	111
4.1.4	RACI Framework.....	111
4.2	Existing Rules and Regulations for Planning in Urban and Rural Areas.....	113
4.2.1	Khyber Pakhtunkhwa Building Control Regulations 2024	113
4.2.2	Khyber Pakhtunkhwa Housing Schemes (Planning, Development and Control) Regulations 2024	114
4.2.3	Khyber Pakhtunkhwa Urban Policy 2023.....	115
4.3	Institutional Gaps and Implementation Strategy	115
4.3.1	Institutional Gap Analysis and Actionable Mechanisms.....	116
4.3.2	Institutional Interventions Recommended for the Execution of District Land Use Plan ...	117
4.3.2.1	Provincial Overseeing and Policy Supervision.....	118
4.3.2.2	Strengthening District-Level Coordination and Decision-Making.....	118
4.3.2.3	Enhancing Local Implementation and Enforcement Capacity	118
4.3.2.4	Permitted, Permissible, and Prohibited Zoning.....	118
4.3.2.5	Improving Monitoring, Enforcement, and Coordination.....	118
4.3.2.6	Agencies Responsible for Implementing the DLUP and their Interventions	119

LIST OF MAPS

MAP 1-1: LOCATION MAP OF DISTRICT DERA ISMAIL KHAN	6
MAP 1-2: ELEVATION PROFILE OF DISTRICT D.I KHAN	10
MAP 1-3: GEOLOGICAL FORMATION OF DISTRICT DERA ISMAIL KHAN.....	11
MAP 1-4: STRUCTURAL AND SEISMOLOGY MAP OF DISTRICT D.I KHAN	12
MAP 1-5: SURFACE WATER RESOURCES IN DI KHAN DISTRICT	13
MAP 1-6: DISTRICT D.I. KHAN WATER DEPTH DISTRIBUTION	14
MAP 1-7: ADMINISTRATIVE BOUNDARIES OF DISTRICT D.I KHAN	22
MAP 1-8: RANK WISE SETTLEMENT HIERARCHY	25
MAP 1-9: DISTRICT D.I. KHAN SETTLEMENTS TO BE URBANIZED	27
MAP 1-10: COMPACT BUILT-UP OF DISTRICT D I KHAN URBAN CENTERS	29
MAP 1-11: COMPACT BUILT-UP OF DISTRICT D I KHAN URBAN CENTERS	29
MAP 1-12: D.I. KHAN MC CHANGE DETECTION ANALYSIS	31
MAP 1-13: PAHARPUR MC GROWTH TREND THROUGH THE YEARS	32
MAP 1-14: PAROA MC GROWTH TREND THROUGH THE YEARS	33
MAP 1-15: KULACHI MC GROWTH TREND THROUGH THE YEARS	34
MAP 1-16: PANYALA TC GROWTH TREND THROUGH THE YEARS	35
MAP 1-17: DARABAN TC GROWTH TREND THROUGH THE YEARS	36
MAP 1-18: DARAZINDA TC GROWTH TREND THROUGH THE YEARS	37
MAP 1-20: D.I. KHAN CITY PROPOSED BOUNDARY.....	38
MAP 1-21: PANYALA URBAN CENTER PROPOSED BOUNDARY	39
MAP 2-1: DISTRICT D.I. KHAN URBAN CENTERS	44
MAP 2-2: EXISTING LANDUSE CLASSIFICATION OF DISTRICT D.I. KHAN	47
MAP 2-3: EXISTING LANDUSE CLASSIFICATION OF TEHSIL D.I. KHAN	49
MAP 2-4: EXISTING LANDUSE CLASSIFICATION OF TEHSIL PAHARPUR.....	51
MAP 2-5: EXISTING LANDUSE CLASSIFICATION OF TEHSIL KULACHI	53
MAP 2-6: EXISTING LANDUSE CLASSIFICATION OF TEHSIL PAROA	55
MAP 2-7: EXISTING LANDUSE CLASSIFICATION OF TEHSIL PANYALA.....	57
MAP 2-8: EXISTING LANDUSE CLASSIFICATION OF TEHSIL DARAZINDA	59
MAP 2-9: EXISTING LANDUSE CLASSIFICATION OF TEHSIL DARABAN	61
MAP 2-10: D.I. KHAN CITY URBAN CENTER EXISTING LANDUSE.....	63
MAP 2-11: PAHARPUR URBAN CENTER EXISTING LANDUSE	65
MAP 2-12: KULACHI URBAN CENTER EXISTING LANDUSE	67
MAP 2-13: PAROA URBAN CENTER EXISTING LANDUSE	69
MAP 2-14: PANYALA URBAN CENTER EXISTING LANDUSE.....	71
MAP 2-15: DARABAN URBAN CENTER EXISTING LANDUSE	73
MAP 2-16: DARAZINDA URBAN CENTER EXISTING LANDUSE.....	75
MAP 3-1: PROPOSED ZONES OF DISTRICT D.I. KHAN.....	78
MAP 3-2: PROPOSED ZONES OF D.I. KHAN CITY	82
MAP 3-3: PROPOSED ZONES OF PAHARPUR URBAN CENTER.....	85

MAP 3-4: PROPOSED ZONES OF PAROA URBAN CENTER	88
MAP 3-5: PROPOSED ZONES OF KULACHI URBAN CENTER	91
MAP 3-6: PROPOSED ZONES OF PANYALA URBAN CENTER	94
MAP 3-7: PROPOSED ZONES OF DARABAN URBAN CENTER	97
MAP 3-8: PROPOSED ZONES OF DARAZINDA URBAN CENTER	100

LIST OF TABLES

TABLE 1-1: DISTRICT D I KHAN POPULATION DISTRIBUTION	14
TABLE 1-2: DISTRICT DI KHAN AGE AND SEX-WISE POPULATION DISTRIBUTION	16
TABLE 1-3: DISTRICT DI KHAN POPULATION DENSITY COMPARED WITH KHYBER PAKHTUNKHWA	17
TABLE 1-4: DISTRICT DI KHAN EMPLOYMENT DETAILS	18
TABLE 1-5: DISTRICT D.I. KHAN LITERACY RATIO	19
TABLE 1-6: DISTRICT DI KHAN EDUCATION ATTAINMENT	20
TABLE 1-7: DISTRICT D.I. KHAN TEHSIL-WISE AREA	21
TABLE 1-8: URBAN VS RURAL PROPORTION IN DISTRICT D.I. KHAN (HISTORICAL).....	23
TABLE 1-9: SETTLEMENTS TO BE URBANIZED	26
TABLE 1-10: COMPACT BUILT-UP BOUNDARIES AREA (HECTARES)	28
TABLE 1-12: VCS SURROUNDING DI KHAN EXISTING URBAN	30
TABLE 1-11: BUILT-UP AREA CHANGE DETECTION 2005-2024	30
TABLE 1-13: POPULATION OF TRANSITIONING AREAS TO BE URBANIZED	39
TABLE 1-14: POPULATION PROJECTION OF DISTRICT D.I. KHAN	40
TABLE 1-15: DENSITY OF PLANNING BOUNDARIES.....	42
TABLE 2-1: DISTRICT D.I. KHAN URBAN CENTERS	43
TABLE 2-2: DISTRICT D.I. KHAN LAND USE CLASSIFICATION	46
TABLE 2-3: TEHSIL D.I. KHAN LAND USE CLASSIFICATION	48
TABLE 2-4: TEHSIL PAHARPUR LAND USE CLASSIFICATION	50
TABLE 2-5: TEHSIL KULACHI LAND USE CLASSIFICATION.....	52
TABLE 2-6: TEHSIL PAROA LAND USE CLASSIFICATION.....	54
TABLE 2-7: TEHSIL PANYALA LAND USE CLASSIFICATION	56
TABLE 2-8: TEHSIL DARAZINDA LANDUSE CLASSIFICATION	58
TABLE 2-9: TEHSIL DARABAN LAND USE CLASSIFICATION.....	60
TABLE 2-10: LAND USE CLASSIFICATION OF D.I KHAN CITY URBAN CENTER (HECTARES).....	62
TABLE 2-11: LAND USE CLASSIFICATION OF PAHARPUR URBAN CENTER (HECTARES).....	64
TABLE 2-12: LAND USE DISTRIBUTION OF KULACHI URBAN CENTER (HECTARES).....	66
TABLE 2-13: LAND USE DISTRIBUTION OF PAROA URBAN CENTER (HECTARES).....	68
TABLE 2-14: LAND USE DISTRIBUTION OF PANYALA URBAN CENTER (HECTARES)	70
TABLE 2-15: LANDUSE DISTRIBUTION OF DARABAN URBAN CENTER (HECTARES).....	72
TABLE 2-16: LANDUSE DISTRIBUTION OF DARAZINDA URBAN CENTER (HECTARES).....	74
TABLE 3-1: D.I. KHAN DISTRICT PROPOSED ZONING STATISTICS.....	77
TABLE 3-2: DERA ISMAIL KHAN DISTRICT AREA STATEMENT OF EXISTING AND PROPOSED LAND USES	79
TABLE 3-3: D.I. KHAN CITY PROPOSED ZONES AREA	81

TABLE 3-4: D.I. KHAN CITY AREA STATEMENT OF EXISTING AND PROPOSED LAND USES	83
TABLE 3-5: PAHARPUR URBAN CENTER PROPOSED ZONES AREA.....	84
TABLE 3-6: PAHARPUR URBAN CENTER AREA STATEMENT OF EXISTING AND PROPOSED LAND USES	86
TABLE 3-7: PAROA URBAN CENTER PROPOSED ZONES AREA	87
TABLE 3-8: PAROA URBAN CENTER AREA STATEMENT OF EXISTING AND PROPOSED LAND USES.....	89
TABLE 3-9: KULACHI URBAN CENTER PROPOSED ZONES AREA	90
TABLE 3-10: KULACHI URBAN CENTER AREA STATEMENT OF EXISTING AND PROPOSED LAND USES.....	92
TABLE 3-11: PANYALA URBAN CENTER PROPOSED ZONES AREA.....	93
TABLE 3-12: PANYALA URBAN CENTER AREA STATEMENT OF EXISTING AND PROPOSED LAND USES	95
TABLE 3-13: DARABAN URBAN CENTER PROPOSED ZONES AREA	96
TABLE 3-14: DARABAN URBAN CENTER AREA STATEMENT OF EXISTING AND PROPOSED LAND USES.....	98
TABLE 3-15: DARAZINDA URBAN CENTER PROPOSED ZONES AREA	99
TABLE 3-16: DARAZINDA URBAN CENTER AREA STATEMENT OF EXISTING AND PROPOSED LAND USES	101
TABLE 4-1: ADAPTED RAC FRAMEWORK.....	112
TABLE 4-2: GAP ANALYSIS AND PROPOSED MECHANISM.....	116

LIST OF FIGURES

FIGURE 1-1: OBJECTIVES OF THE STUDY.....	4
FIGURE 1-2: STEPWISE PROJECT PROCESS.....	5
FIGURE 1-3: DISTRICT D I KHAN AVG TEMPERATURE (1979-2024).....	8
FIGURE 1-4: DISTRICT DI KHAN MEAN AVERAGE PRECIPITATION	9
FIGURE 1-5: DISTRICT DI KHAN WIND ROSE	9
FIGURE 1-6: DISTRICT DI KHAN POPULATION DISTRIBUTION - HISTORICAL PERSPECTIVE.....	15
FIGURE 1-7: DISTRICT DI KHAN AGE AND SEX-WISE POPULATION DISTRIBUTION	16
FIGURE 1-8: DISTRICT DI KHAN POPULATION DENSITY COMPARISON WITH KHYBER PAKHTUNKHWA	17
FIGURE 1-9: DISTRICT D.I. KHAN EMPLOYMENT.....	19
FIGURE 1-10: DISTRICT DI KHAN LITERACY RATIO COMPARISON	20
FIGURE 1-11: DISTRICT DI KHAN EDUCATION ATTAINMENT.....	21
FIGURE 1-12: DRIVERS OF URBANIZATION	23
FIGURE 1-13: URBANIZATION TREND IN DISTRICT D.I. KHAN	24
FIGURE 1-14: URBAN CENTER PROPOSED BOUNDARY DELINEATION PROCESS.....	28
FIGURE 1-15: POPULATION PROJECTION FOR THE PLAN PERIOD.....	41
FIGURE 4-1: ADMINISTRATIVE SETUP OF KP FOR DLUP IMPLEMENTATION	104
FIGURE 4-2: LOCAL GOVERNMENT, ELECTIONS, AND RURAL DEVELOPMENT DEPARTMENT ORGANOGRAM	108

Executive Summary

The effective regulation and sustainable management of land resources constitute a core mandate of local governments. In District Dera Ismail Khan, however, unplanned and largely unregulated horizontal urban expansion has resulted in the conversion of productive agricultural land, inefficient land utilization, environmental degradation, and mounting pressure on infrastructure and public services. These trends pose serious risks to food security, climate resilience, and the district's capacity to align with national development objectives and international commitments, including the Sustainable Development Goals (SDGs). The absence of an integrated, enforceable land-use framework highlights the urgent need for a strategic planning approach to guide sustainable urban growth and long-term socio-economic development.

In response to these challenges, the Government of Khyber Pakhtunkhwa initiated the preparation of District Land Use Plans (DLUPs) for all districts across the province. Under the Provincial Land Use Plan (PLUP) Project, with technical oversight provided by the Urban Policy and Planning Unit (UPPU), a consultancy was awarded through a competitive process to the Urban Unit (Urban Sector Planning & Management Services Unit Pvt. Ltd., Lahore) for the preparation of land-use plans for 22 districts, including District Dera Ismail Khan.

The Draft District Dera Ismail Khan Land-Use Plan establishes a comprehensive, evidence-based, and forward-looking framework for the sustainable, efficient, and equitable utilization of land resources. The plan systematically documents and classifies existing land uses and proposes future land allocations based on demographic trends, environmental sensitivity, infrastructure capacity, and economic potential. Its overarching objective is to promote sustainable land management by minimizing land-use conflicts, protecting environmentally and culturally significant areas, and guiding development through an integrated, multi-sectoral planning approach. The plan seeks to enhance environmental quality, strengthen infrastructure provision, diversify the local economy, and improve the quality of life for both urban and rural communities.

To effectively manage future growth, the plan introduces a structured settlement hierarchy comprising a primary urban center, secondary towns, satellite settlements, and designated industrial and economic nodes. This spatial framework is intended to optimize land utilization, reduce development pressure on the main city, improve access to services, and promote balanced and inclusive development across the district.

The planning process identified several critical challenges confronting District Dera Ismail Khan, including uncontrolled urban sprawl, informal and unauthorized housing developments, encroachment on agricultural land, and inadequate provision of infrastructure and public services such as transportation, healthcare, education, water supply, sanitation, and solid waste management. Environmental concerns—particularly land degradation, water scarcity, pollution, and the loss of natural habitats—further exacerbate the district's vulnerability to climate-related risks.

Despite these challenges, District Dera Ismail Khan possesses considerable development potential. Its strong agricultural base, prospects for agro-processing and livestock development, emerging industrial activities, and strategic regional connectivity position the district as an important economic and service hub in southern Khyber Pakhtunkhwa. Stakeholder consultations undertaken during the planning process revealed a shared vision to transform Dera Ismail Khan into a well-planned, livable, environmentally resilient, and economically vibrant district supported by improved governance and service delivery.

The proposed land-use zoning framework allocates land across clearly defined categories, including residential, commercial, mixed-use, industrial, agricultural, institutional, recreational, and conservation zones. Particular emphasis is placed on the protection of prime agricultural land, conservation of forests, riverine corridors, and ecologically sensitive areas, and the promotion of compact, efficient urban development. Designated industrial and commercial zones are intended to stimulate investment, generate

employment, and support sustained economic growth, while adequate provision for education, healthcare, and public institutions is to strengthen the district's social infrastructure.

To enhance environmental sustainability and resilience, the plan incorporates measures such as the development of green spaces, promotion of urban agriculture, afforestation, water conservation initiatives, wastewater treatment facilities, buffer zones, and climate-responsive land-use controls. These interventions aim to mitigate environmental risks, improve public health outcomes, and enhance overall livability.

The plan concludes that, in the absence of timely and coordinated intervention, District Dera Ismail Khan faces the risk of continued environmental degradation, inefficient land consumption, and widening socio-economic disparities. Accordingly, the Draft Land-Use Plan proposes a comprehensive and enforceable strategy grounded in zoning regulations, institutional strengthening, infrastructure investment, and environmental stewardship. The guiding vision is to position Dera Ismail Khan as a resilient, well-connected, and economically self-sustaining district offering a high quality of life to its residents.

To support effective implementation, the plan recommends strengthening institutional and legal frameworks for land-use governance, enhancing inter-agency coordination, improving transportation and regional connectivity, expanding public service facilities, and adopting modern systems for water management, sanitation, and solid waste disposal. Environmental initiatives—such as afforestation, pollution monitoring, and urban greening—are prioritized, alongside incentives to encourage private-sector investment in agriculture, agro-processing, industry, and renewable energy.

Looking ahead, the plan outlines a phased implementation strategy beginning with the finalization of the draft through public hearings and stakeholder feedback. Following approval, the plan will be formally adopted by relevant provincial and district authorities and integrated into development control and investment planning processes. Regular monitoring, evaluation, and periodic updates are envisaged to ensure responsiveness to emerging trends and evolving development needs. Stakeholder participation will remain central to implementation, ensuring that growth in District Dera Ismail Khan is inclusive, balanced, and aligned with the district's long-term vision for sustainable development.

1. PROLOGUE

1.1 Introduction

1.1.1 Background

Khyber Pakhtunkhwa's population is growing at an annual rate of 2.89%¹, and at this pace, it is projected to double by 2042. This rapid growth will place significant pressure on the province's natural resources and public infrastructure, leading to challenges such as inefficient land use, the conversion of agricultural land for commercial and residential purposes, water scarcity, deforestation, and environmental degradation. To address these issues, comprehensive district-level land use planning is essential to ensure the sustainable and efficient management of resources for present and future generations.

Land use planning plays a pivotal role in shaping settlements' social and economic landscape by assessing future population size, structure, and distribution. It also serves as a strategic tool for guiding agricultural and industrial development. Recognizing its importance, the Government of Khyber Pakhtunkhwa has initiated the preparation of District Land Use Plans (DLUPs) for all districts of the province. To implement this initiative, the Provincial Land Use Plan Project (PLUP) and the Urban Policy and Planning Unit (UPPU) have awarded a consultancy contract through a competitive bidding process to the Urban Unit (Urban Sector Planning & Management Services Unit Pvt. Ltd., Lahore) for the preparation of land use plans of 22 districts.

The Land Use Plan for District DI Khan is a comprehensive and evidence-based planning document. This plan is a strategic framework to guide future growth by developing a comprehensive approach to land use and spatial planning in response to rapid population growth, urban expansion, and unregulated land conversion. Utilizing both primary and secondary data sources, the planning process involved household surveys, transportation and land use surveys, and stakeholder consultations. The plan proposes land use zoning, new urban areas to optimize land use, and minimize conflicts between residential, commercial, agricultural, and industrial land use. It emphasizes protecting ecologically sensitive areas through evidence-based planning. The plan incorporates legal mechanisms, institutional roles, and regulatory guidelines to support its execution at the district level.

Furthermore, the Land Use Plan will help to induce sustainable development, optimize the exploitation of land and physical resources, enhance provincial income, increase overall activity, and balance the distribution of infrastructure and services. The Land Use Plan will be a tool to provide guidance to the Provincial Government, Urban Policy Unit, and TMAs for undertaking integrated and coherent development programs.

Based on many studies, the District Land Use Plan deals with efficient placement of broad, District-level Land Use and zoning for the sustainable growth of a District as a whole. It differs from the urban structure plans in many ways. A District can have more than one urban area and hundreds of villages, and the District Plan has to consider all. Besides, the nature of Land Uses at the District level is not commonly found in an urban area, such as large-scale agriculture, rangeland, forestry, livestock, fishery, etc. As against the District Plan, the focus in urban plans is identification of issues and solutions for the Central Business District, neighborhood planning, urban municipal services, etc.

¹ 6th Population Census & Housing Census 2017, Pakistan Bureau of Statistics, Government of Pakistan.

1.1.2 Objectives

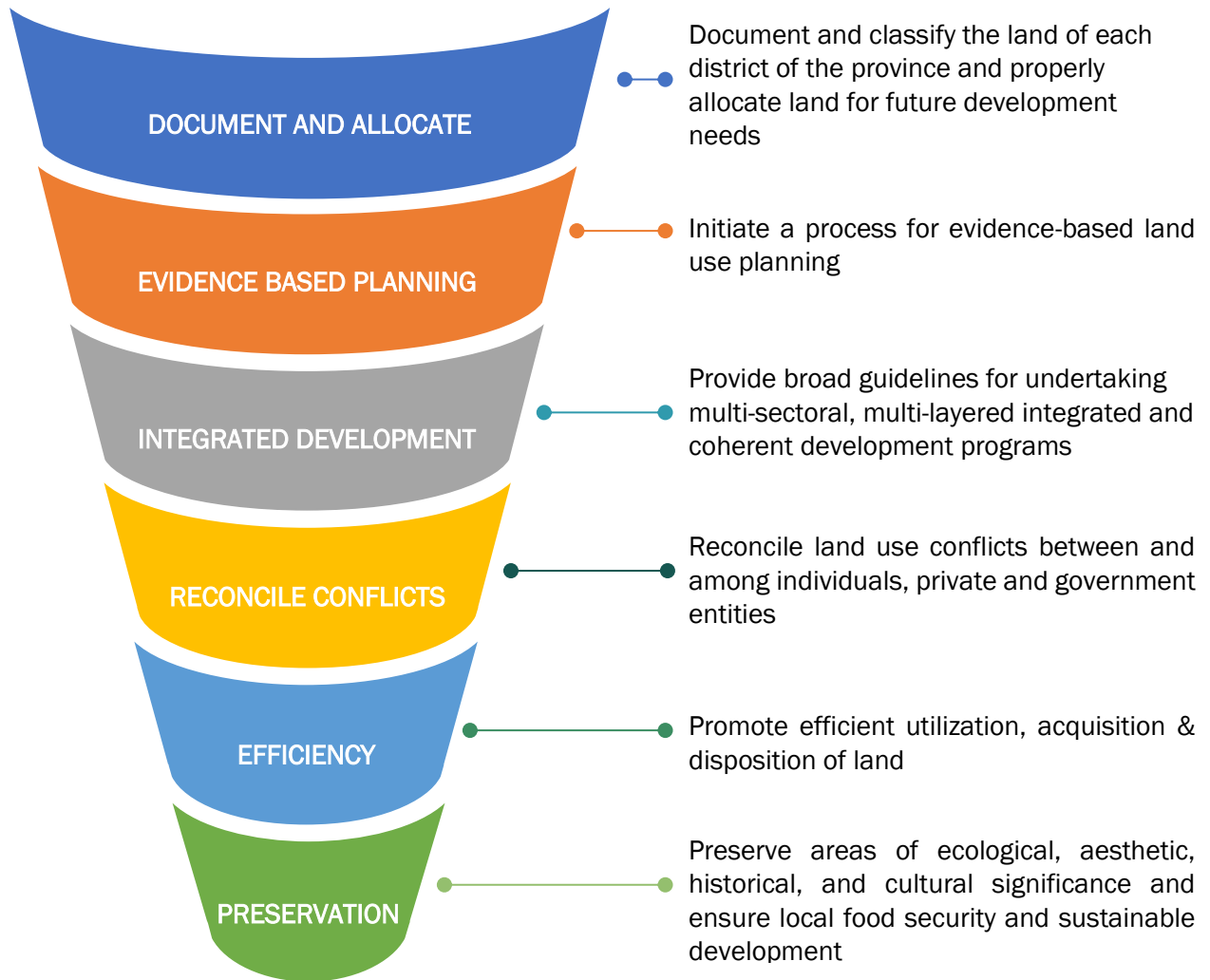


Figure 1-1: Objectives of the Study

1.1.3 Land Use Planning Process

Land use planning is believed to be holistic and relies on a detailed study of the project area and a thorough and critical analysis of data, as well as being responsive to the growing needs of the diversifying population. The consultant maintains that effective land use planning promotes sustainable development by simultaneously transforming the physical landscape and strengthening economic foundations. The balance between economic growth and environmental protection may not be achieved solely through the land use plans prepared by technical expertise of consultants, only rather requires participation of Government entities and all relevant stakeholders in the process. The preparation process of the District Land Use Plan is classified into 09 steps presented in Figure 1-2 below:

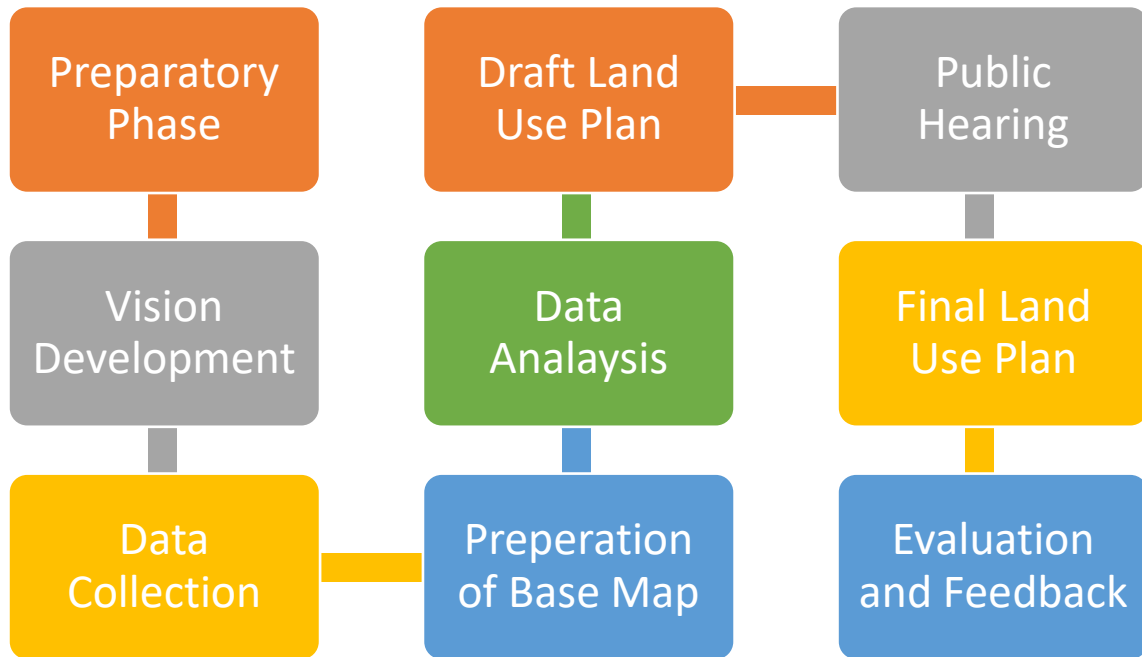


Figure 1-2: Stepwise Project Process

1.1.4 Project Methodology

The planning process for the District Land Use Plan follows a structured and phased approach. It begins with the Preparatory Phase, where the consultant reviews the Terms of Reference (TORs), finalizes the methodology, identifies key stakeholders, and reviews their involvement at different stages of the project. This was followed by Vision Development, in which a collective vision for the district was formulated through focus group discussions (FG) and stakeholder workshops.

The next step, Data Collection, involved gathering both primary and secondary data across multiple sectors, including housing, transport, environment, and Land use surveys. Using this data, the team proceeded with the Preparation of Base Maps and GIS-based spatial classification to visualize existing land use patterns. These components fed into a comprehensive Data Analysis phase, where socio-economic trends, land utilization patterns, and urbanization dynamics were evaluated.

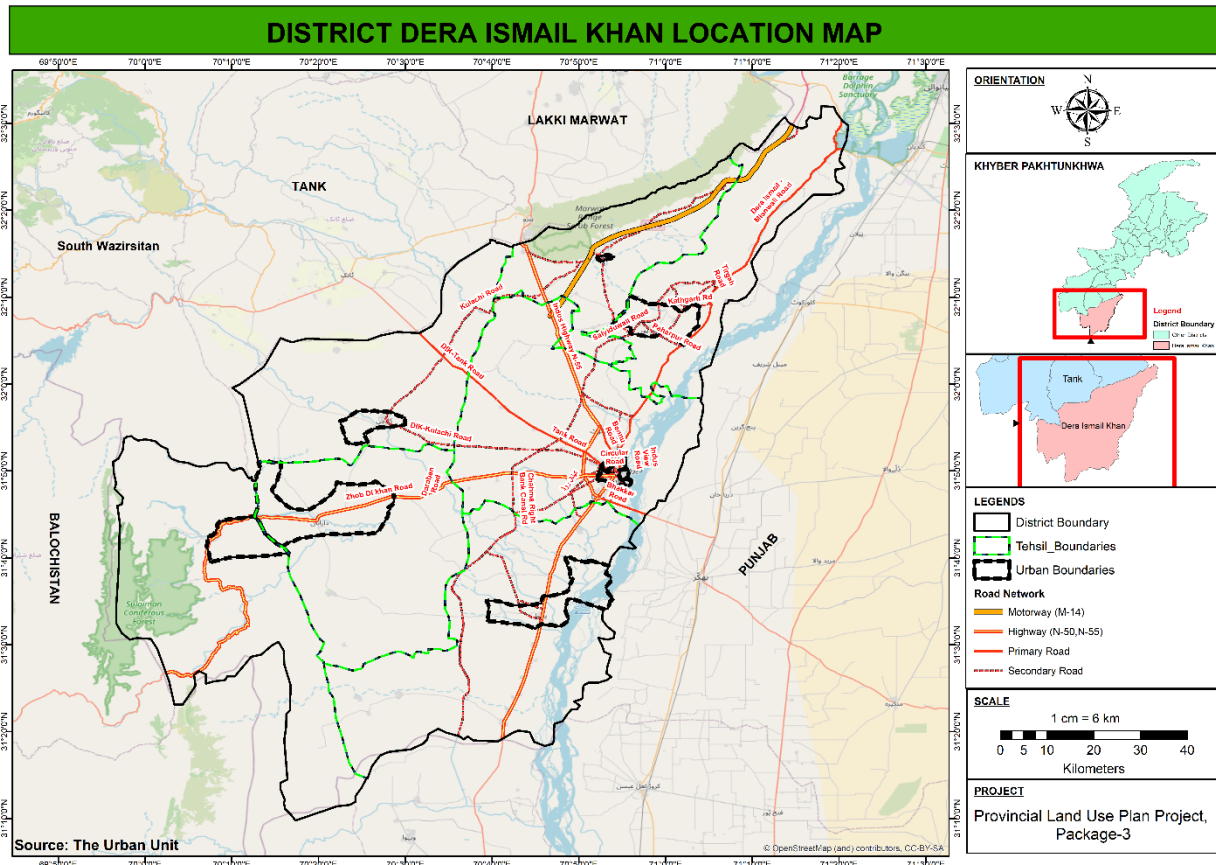
Based on these insights, the Draft Land Use Plan was prepared, outlining zoning proposals, infrastructure distribution, and regulatory frameworks. The consultant will conduct a public hearing immediately after the draft land use plan is prepared to solicit feedback from stakeholders and the general public. The input gathered during the hearing will be carefully reviewed and incorporated where necessary to refine the final land use plan. The final land use plan will be approved by the Land Use and Building Control Council and will be handed over to the district administration for implementation and execution.

1.1.5 Project Area

District Dera Ismail Khan, also known as DI Khan, is a prominent district, located in the Southernmost part of Khyber Pakhtunkhwa bordered by the Lakki Marwat district in the North and the South Waziristan and Tank Districts in the Northwest. Towards its East lies the Punjab province (Bhakkar District), and towards its Southwest lies the Balochistan province (Zhub District), while towards its South also lies the Punjab province (Layyah District).

The district DI Khan spans **9055.25** square kilometers. It includes seven Tehsils (Dera Ismail Khan, Kulachi, Daraban, Paroa, Paharpur, Panyala, and Darazinda). Furthermore, the urban areas of Dera Ismail Khan are around the aforementioned tehsils.

The location of District DI Khan concerning Khyber Pakhtunkhwa and the Southern region is represented in **Map** below.



Map 1-1: Location Map of District Dera Ismail Khan

1.2 Vision Development

Vision development is crucial in land use planning as it provides a clear, long-term direction for sustainable growth and development. The Vision Development activity aimed to identify the concerns and suggestions of the public and all stakeholders to create a collective vision for achieving sustainable development through improved allocation and use of land in the district. Vision development for the project area was contingent upon the results of the reconnaissance survey, particularly on the feedback provided by the local community. The vision described how the project area would look physically, socially, and environmentally. It helps communities, stakeholders, and policymakers establish shared goals, ensuring that land is utilized efficiently to balance economic, social, and environmental needs.

1.2.1 Key Findings

The vision development exercise for District D.I. Khan highlighted both its opportunities and pressing challenges. The district possesses an established economic zone, rich tourism potential, diverse cultural heritage, and vast resources in agriculture, minerals, and oil and gas. However, these strengths remain underutilized due to weak infrastructure, inadequate investment opportunities, and the absence of comprehensive planning. The district’s valuable biodiversity and natural ecosystems are increasingly threatened by climate change, population growth, and unchecked development activities.

Without proper policies and regulations, D.I. Khan risks unplanned growth that may erode its cultural identity, diminish its environmental resources, and restrict its economic potential. While the district is naturally oriented toward business and agricultural development, the lack of coordinated strategies has limited its progress.

The people of D.I. Khan aspire to see their district evolve into a vibrant regional industrial hub, driven by its mineral, oil, gas, and agricultural sectors. They envision an improved economy supported by better healthcare, education, road infrastructure, and public amenities, all while preserving the cultural diversity of the district.

To realize this vision, it is essential to formulate and implement effective land use policies, development regulations, and sector-specific plans. Strategic actions include the establishment of business

development centers, industrial zones, and the promotion of agriculture and the small-scale handicraft industry. Upgrading road infrastructure and enhancing connectivity with industrial and agricultural hubs will be critical in attracting investments, creating employment opportunities, and fostering inclusive growth. If these measures are pursued, D.I. Khan can transition into a well-planned, economically dynamic, and socially prosperous district.

1.2.2 Vision Statement

Visions created from focus group discussions with the general public and the consultative workshop with the district administration and stakeholders were blended into a single vision statement for DI Khan, which is written below:

“D.I. Khan - A harbor of cultural diversity and business opportunities”

1.2.2.1 Goals

Based on the Vision statement, the goals derived for the DI Khan Land Use Plan were:

- 1. To provide spaces for cultural and recreational activities.***
- 2. To create a clean and green District.***
- 3. Improve industrial activity and business opportunities.***
- 4. To provide better education and health facilities***

1.2.2.2 Objectives

Based on the goals derived in the above section, the following objectives were formulated:

- 1. Allocate land for cultural festivals and social interaction**
- 2. Allocate land for parks and playgrounds**
- 3. Allocate land for solid waste management and wastewater disposal**
- 4. Dedicate space for horticulture**
- 5. Promote well-planned developments with consideration of aesthetics**
- 6. Identify land for industrial zoning**
- 7. Identify and protect natural resources (raw materials)**
- 8. Formulate policies to support planned conversion of other land uses to industrial and commercial land use**
- 9. Allocate land to meet the public demand for schools, colleges, and universities by 2045**
- 10. Allocate space for health facilities in urban-rural settings**

1.3 Physical Characteristics of the District

1.3.1 Climate

D.I Khan has an arid to semi-arid sub-tropical climate with seasonal variations in temperature, rainfall, and wind. From 1979 to 2024, climate data show that the summer season is dry and hot. Temperature begins to rise in April, and the months of May, June, July, and August are extremely hot. June is the hottest one in which the temperature shoots above 45 degrees centigrade. In May and June, the humidity is very low. The hot wind, locally called loo, blows across the district.² The detailed analysis of the climate for District DI Khan is as follows.

1.3.1.1 Temperature Pattern

From 1979 to 2024, District DI Khan climate data shows a steady rise in temperatures from January, peaking in June with a mean daily maximum of 41 °C and a minimum of 29 °C, reflecting intense summer heat. May and June are the hottest months, while January and December are the coldest, with minimums dropping to 7 °C and 8 °C, respectively. After June, temperatures gradually decline, displaying a seasonal pattern typical of semi-arid regions, with significant day-night temperature contrasts. This profile is vital for understanding the region’s agriculture, water management, and human comfort.

Dera Ismail Khan

31.83°N, 70.90°E (177 m asl).
Model: ERA5T.

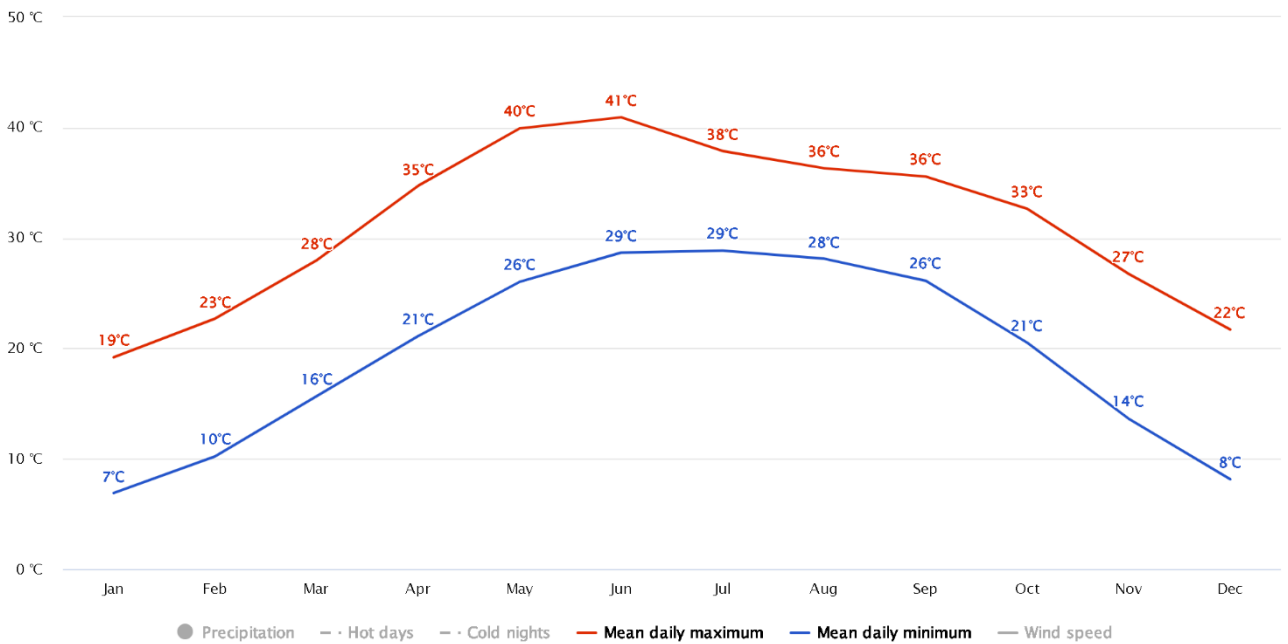


Figure 1-3: District D I Khan Avg Temperature (1979-2024)³

1.3.1.2 Rainfall

From 1979 to 2024, District DI Khan exhibited a highly seasonal rainfall pattern, with most precipitation concentrated in July and August (152 mm and 136 mm), driven by the South Asian monsoon. Spring months receive moderate rain, while winter and late autumn see minimal rainfall, dropping to 10mm in December. This uneven distribution impacts agriculture, water planning, and drought resilience in the region.

² <https://en-gb.topographic-map.com/map-z8g1h/Dera-Ismail-Khan/>

³ https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/dera-ismail-khan_pakistan_1180281

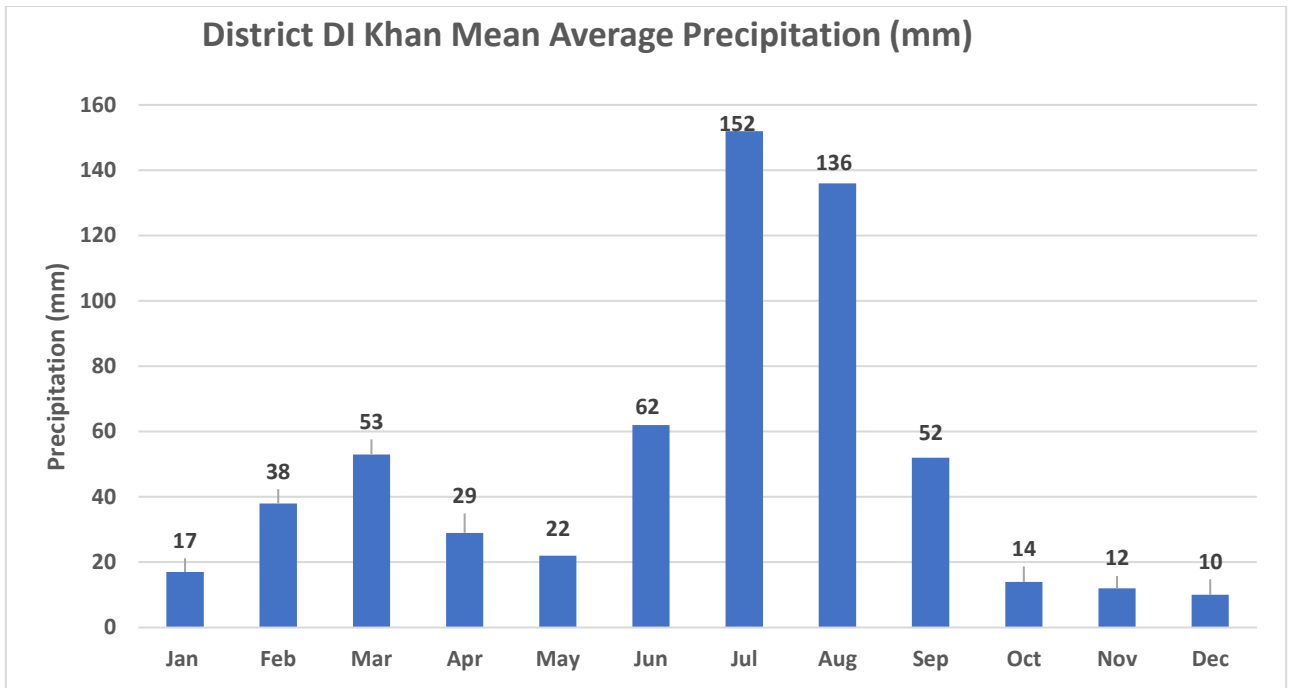


Figure 1-4: District DI Khan Mean Average Precipitation⁴

1.3.1.3 Wind-Direction

In District DI Khan, prevailing winds mainly blow toward the N, NNW, and NNE, with the weakest winds from the WSW and SW. Wind speeds are generally light to moderate, ranging from 4–13 km/h, with highs of 10–20 km/h and lows below 5 km/h across all directions.

Dera Ismail Khan
 31.83°N, 70.90°E (177 m asl).
 Model: ERA5T.

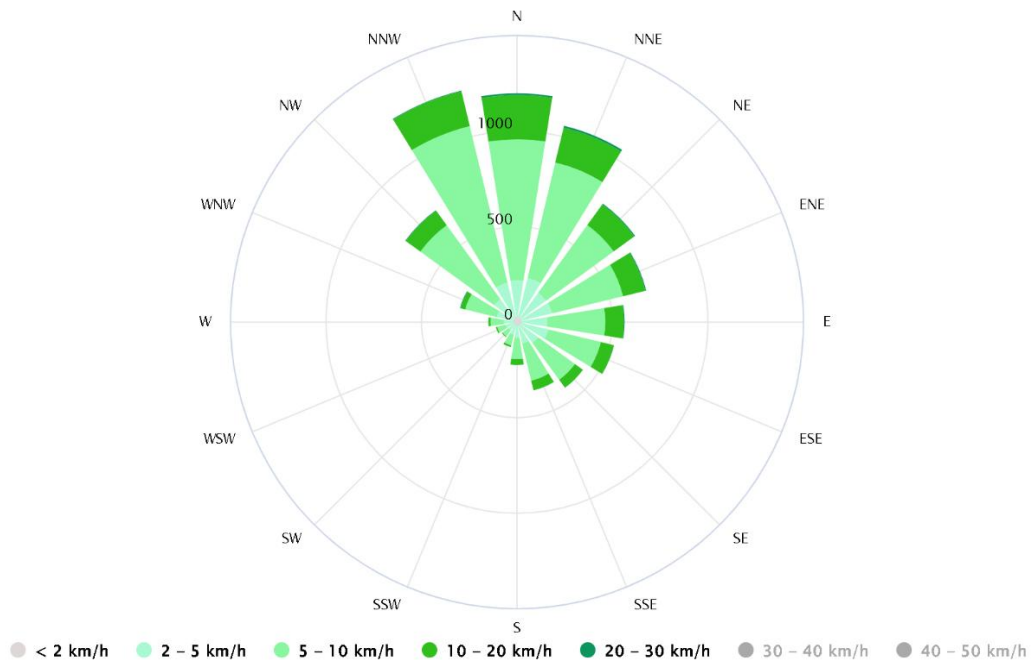


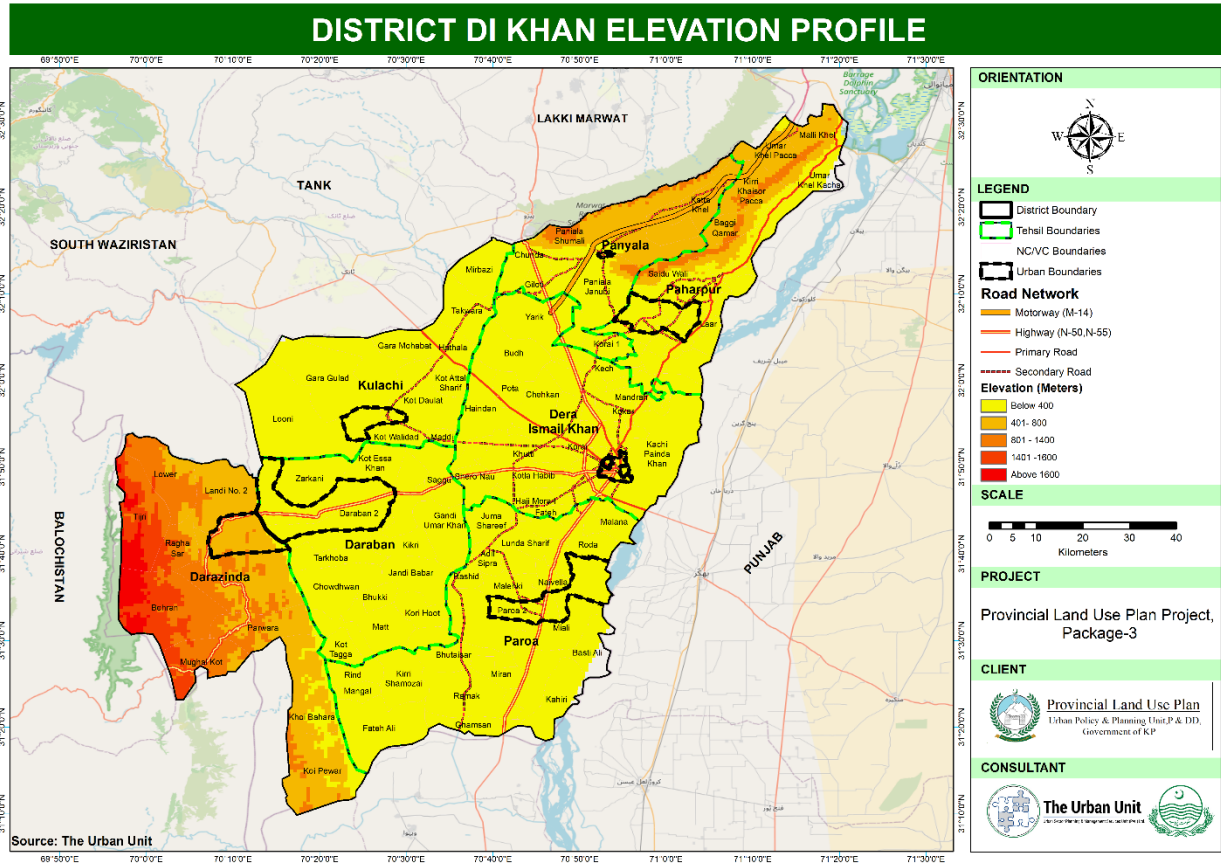
Figure 1-5: District DI Khan Wind Rose⁵

⁴ https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/dera-ismail-khan_pakistan_1180281

⁵ https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/dera-ismail-khan_pakistan_1180281

1.3.2 Elevation

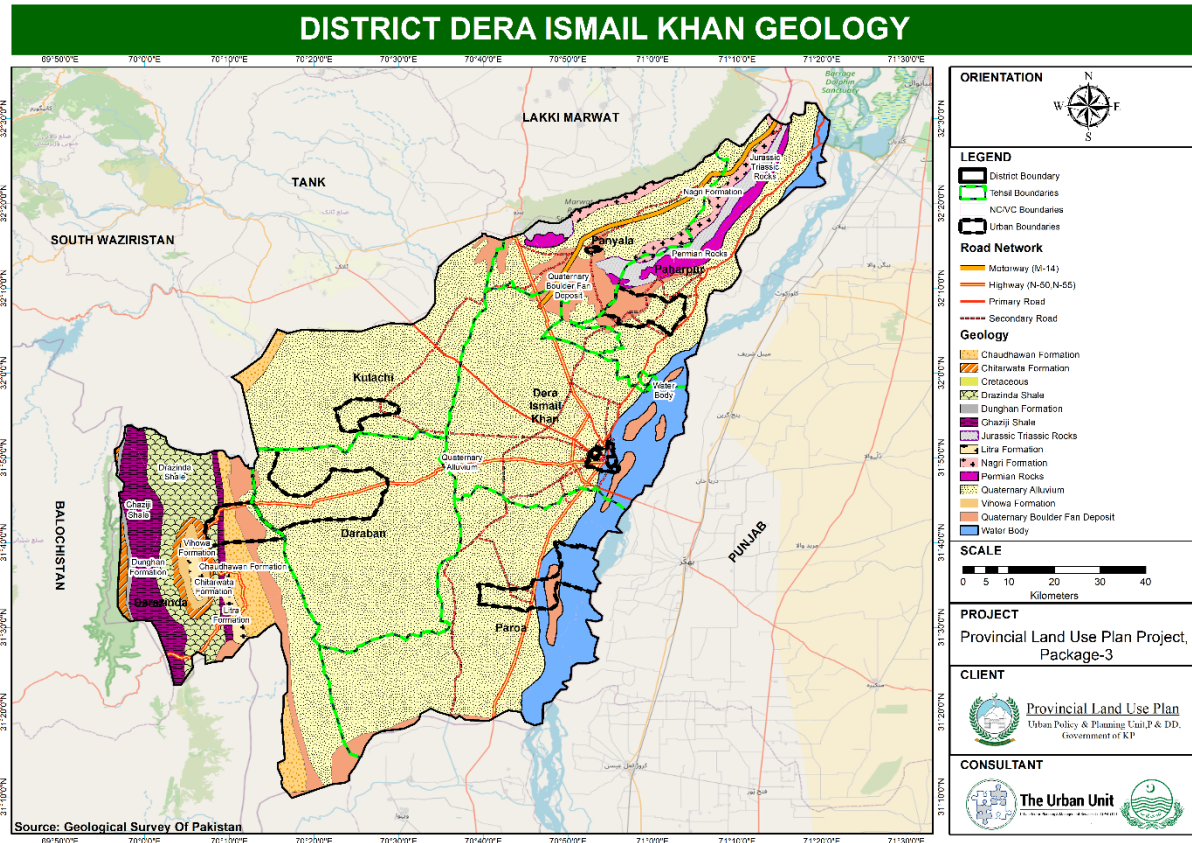
The elevation map of District D.I. Khan shows vast low-lying plains below 400 meters across the central and eastern areas, while elevations of 401–800 meters occur in scattered western tracts. Higher ranges of 801–1,400 meters and above are concentrated along the western border with Balochistan and South Waziristan, contrasting fertile eastern plains with rugged western terrain.



Map 1-2: Elevation Profile of District D.I Khan

1.3.3 Geology

The geology of District D.I. Khan is marked by extensive Quaternary Alluvium, providing fertile soils and vital groundwater recharge zones, while Boulder Fan Deposits shape land stability and drainage. Prominent formations such as Chaudwan, Chinji, Dhok Pathan, and Nagri offer potential for construction materials and minerals, with Jurassic–Triassic rocks and older Datta and Kingriali formations adding further resource diversity. The Indus River belt enhances agricultural productivity through fertile plains and surface water resources. Together, these features make D.I. Khan a district of both agricultural strength and mineral potential, with geology strongly influencing land use and settlement patterns.



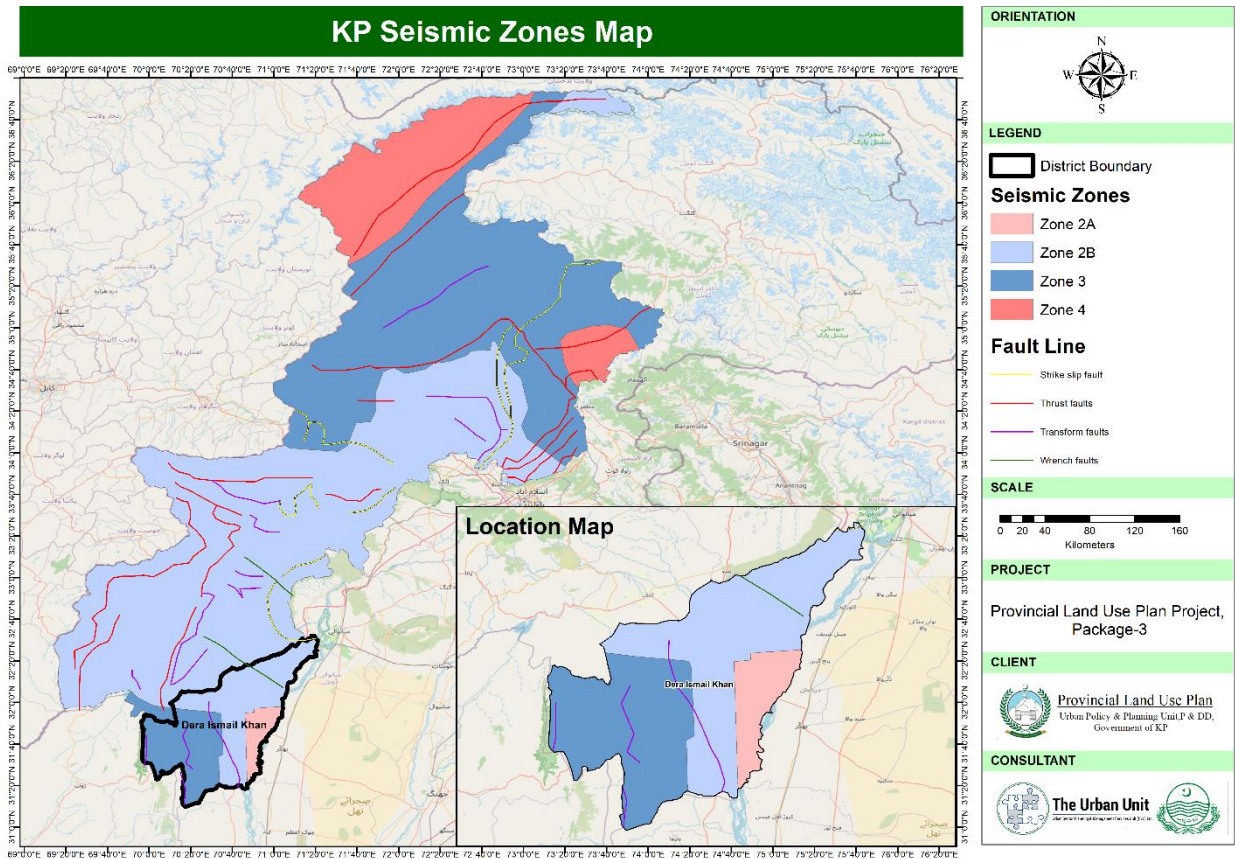
Map 1-3: Geological Formation of District Dera Ismail Khan

1.3.4 Seismic Condition

As per the Seismic Zones of Pakistan, Dera Ismail Khan District, belongs to Zone 2A, and a part of District is in Zone 2B of the Seismic Zone Map of Pakistan. The D.I Khan area lies under zone 2A resulting in moderate to medium earthquakes⁶ occurred in the past. Since 2022, Dera Ismail Khan has had 16 Earthquakes of magnitudes up to 5.47. The district includes transform faults and a wrench fault. Though not in a high-risk zone, the area requires earthquake-resilient planning due to its complex fault network.

⁶ <https://earthquaketrack.com/pk-03-dera-ismail-khan>

⁷ <https://www.volcanodiscovery.com/place/14189/earthquakes/dera-ismail-khan.html>



Map 1-4: Structural and Seismology Map of District D.I Khan

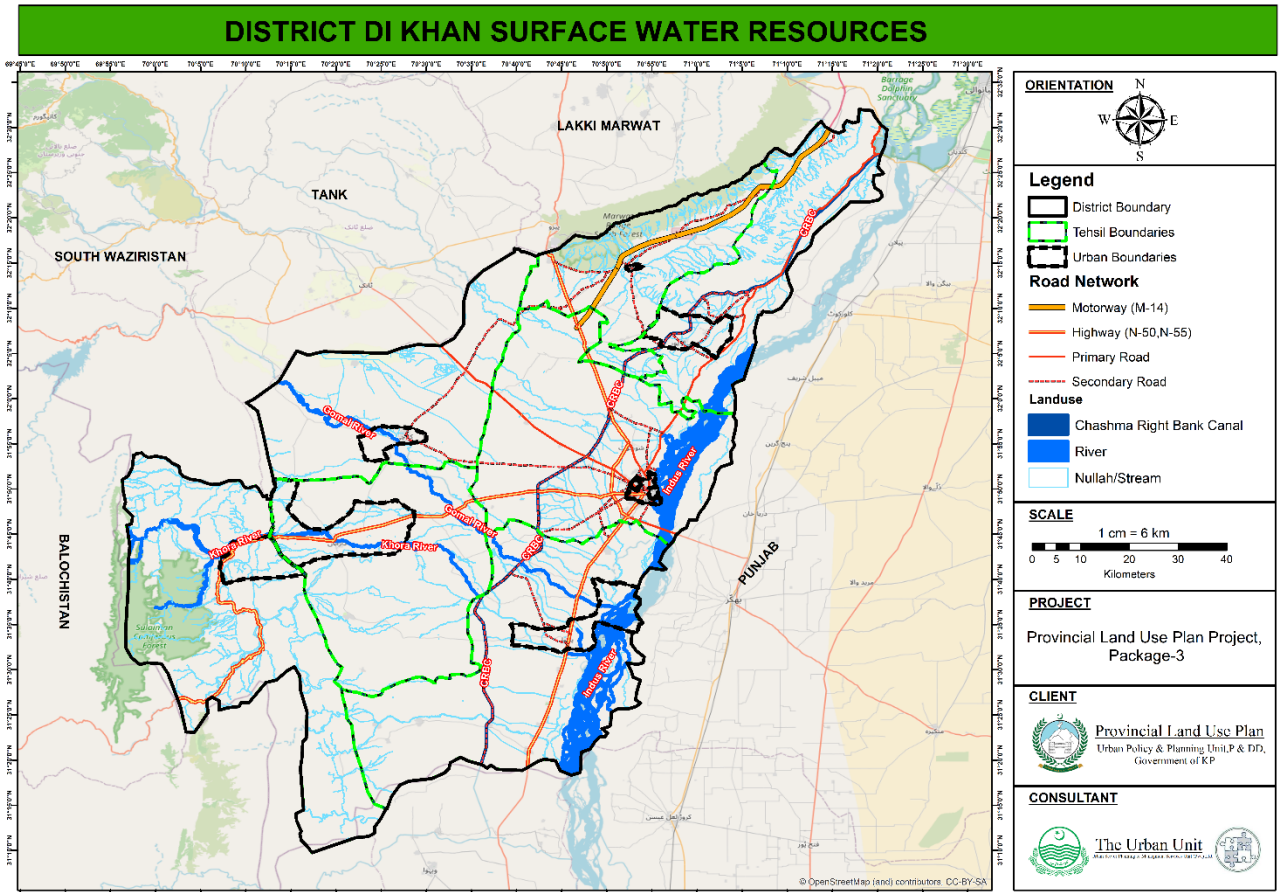
1.3.5 Hydrology

Dera Ismail Khan (D.I. Khan) faces acute water scarcity due to its semi-arid climate and geology. The district benefits from a well-developed irrigation and canal system, mainly supported by the Chashma Right Bank Canal and the Indus River. These water sources have turned the region into a fertile agricultural hub, allowing for the cultivation of a wide variety of crops and fruits, significantly boosting the district's agricultural output.

1.3.6 Surface Water Resources

Groundwater, extracted through tube wells installed mainly by PHED and WSSC, remains the primary drinking water source, though availability and discharge vary across the district. Investigations have identified two major groundwater development belts: one paralleling the Indus River from the Khisor Range southward, and another extending from the Gomal River gorge to Kot Azam, both offering better prospects due to favorable strata and water quality. Other marginal areas have usable water but at higher costs owing to depth and low permeability, while the central belt from Tank to the Indus near D.G. Khan contains highly mineralized water with limited aquifers.

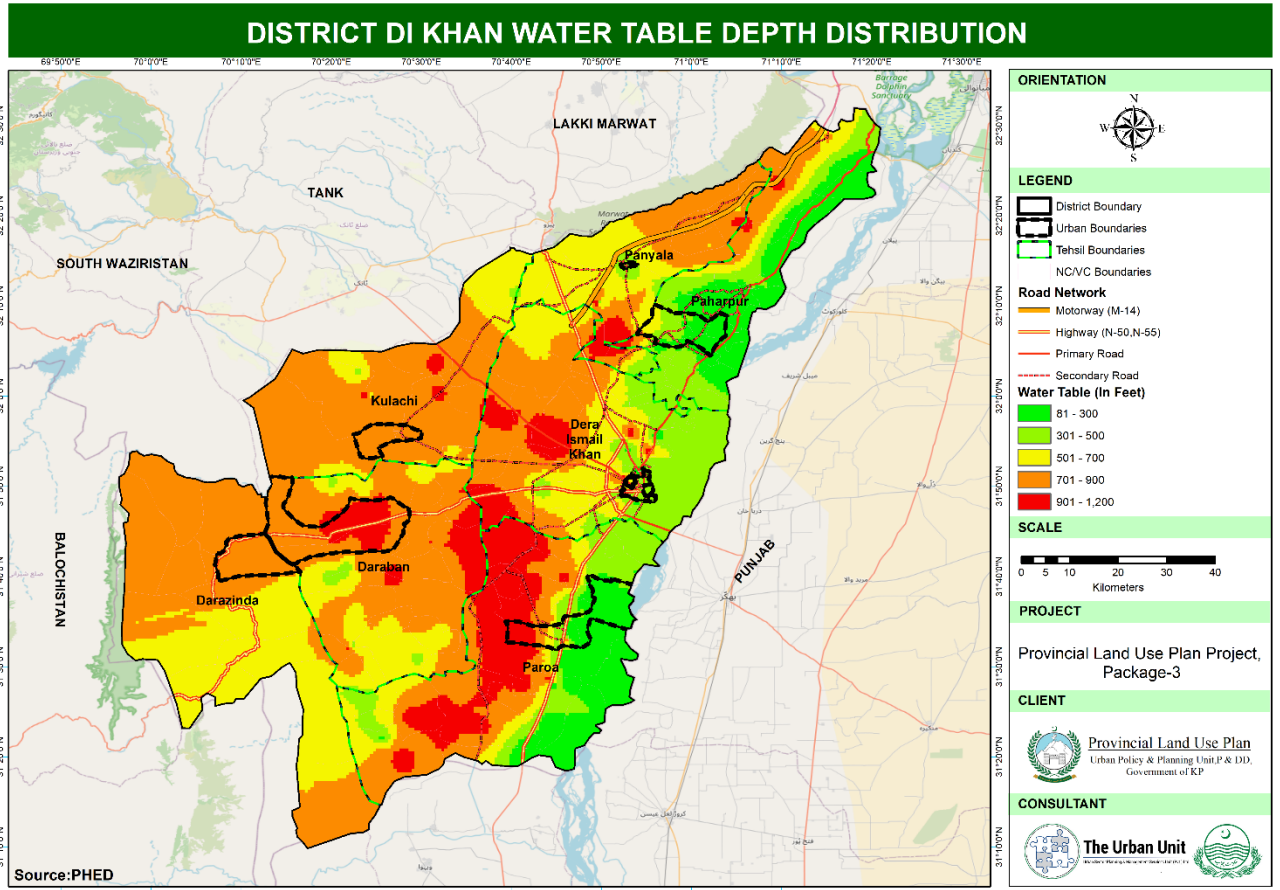
Surface water resources include the Indus River, Paharpur Canal, Tank Zam, Gomal, Khora rivers, and Chashma Right Bank Canal (CRBC) as main canal system. To address scarcity, the provincial government has planned three small dams—Tank Zam, Chodhwan Zam, and Daraban—aimed at irrigating 109,721 acres and generating 25.5 MW of electricity to support local communities.



Map 1-5: Surface Water Resources in DI Khan District

1.3.7 Water Table

The Water depth in District D.I. Khan has been assessed using PHED data, illustrating groundwater levels for each settlement through a color-gradient map. The minimum water depths range between 81 and 340 feet, predominantly in eastern areas of Dera Ismail Khan, Paharpur and Paroa tehsils adjacent to Indus River. In contrast, the maximum water levels of 1200 feet—are observed in the central regions, particularly within Daraban, Darazinda and Kulachi tehsils.



Map 1-6: District D.I. Khan Water Depth Distribution

1.4 Socio-Economic Profile

1.4.1 Population Distribution

According to the Block-Wise Population Census 2023, District D.I. Khan has a total population of 1,829,811; out of these, 374757 people reside in urban areas, while the remaining 1455054 people lives in rural areas. In 1951, there were only three urban areas: D.I. Khan MC, D.I. Khan Cantonment, and Kulachi MC. Later on, in 1961, Paharpur emerged as a new urban area, and recently, in 2017, Paroa and Panyala became officially urbanized.

The population distribution of District D I Khan is given in the **Table** below.

Table 1-1: District D I Khan Population Distributions⁸

Administrative Area	1951	1961	1972	1981	1998	2017	2023
District Urban	48,584	57,862	74,934	91,595	125,807	396,320	421771
District Rural	222,200	244,525	355,117	458,661	766,178	1,299,368	1414476
District Overall	270,784	302,387	430,051	550,256	891,985	1,695,688	1,836,247
Urban Proportion	18%	19%	17%	17%	14%	23%	20%
Urban Areas							
Darazinda Town Committee	-	-	-	-	-	8,842	10347
Daraban Town Committee	-	-	-	-	-	26,932	30231
DI Khan Municipal Committee	39,786	44,319	57,296	64,358	86,969	211,760	220575
DI Khan Cantonment	1,817	1,821	1,482	3,787	5,145	5,697	6436
Kulachi Municipal Committee	6,981	7,190	9,315	14,785	19,113	23,053	24481

⁸ Pakistan Bureau of Statistics. (April, 2021). District DI Khan-Final Results of Sixth Population and Housing Census-2017. Table-1: Area, Population by Sex, Sex Ratio, Population Density, Urban Proportion, Household Size and Annual Growth Rate.

Administrative Area	1951	1961	1972	1981	1998	2017	2023
Paharpur Municipal Committee	-	4,532	6,841	8,665	14,580	69,289	76027
Panyala Town Committee	-	-	-	-	-	10,866	11669
Paroa Municipal Committee	-	-	-	-	-	39,881	42005
Rural Areas							
Darazinda	47,889	30,499	49,822	55,824	38,990	59,714	72039
Daraban	25,526	31,781	41,183	52,734	73,658	97,001	119216
DI Khan	69,600	92,661	144,527	198,396	270,676	490,518	547404
Kulachi	15,856	20,019	27,190	30,704	48,143	78,801	78114
Paharpur	63,329	69,565	92,395	121,003	204,009	213,851	236373
Panyala	-	-	-	-	-	93,646	82398
Paroa	-	-	-	-	130,702	265,837	278932

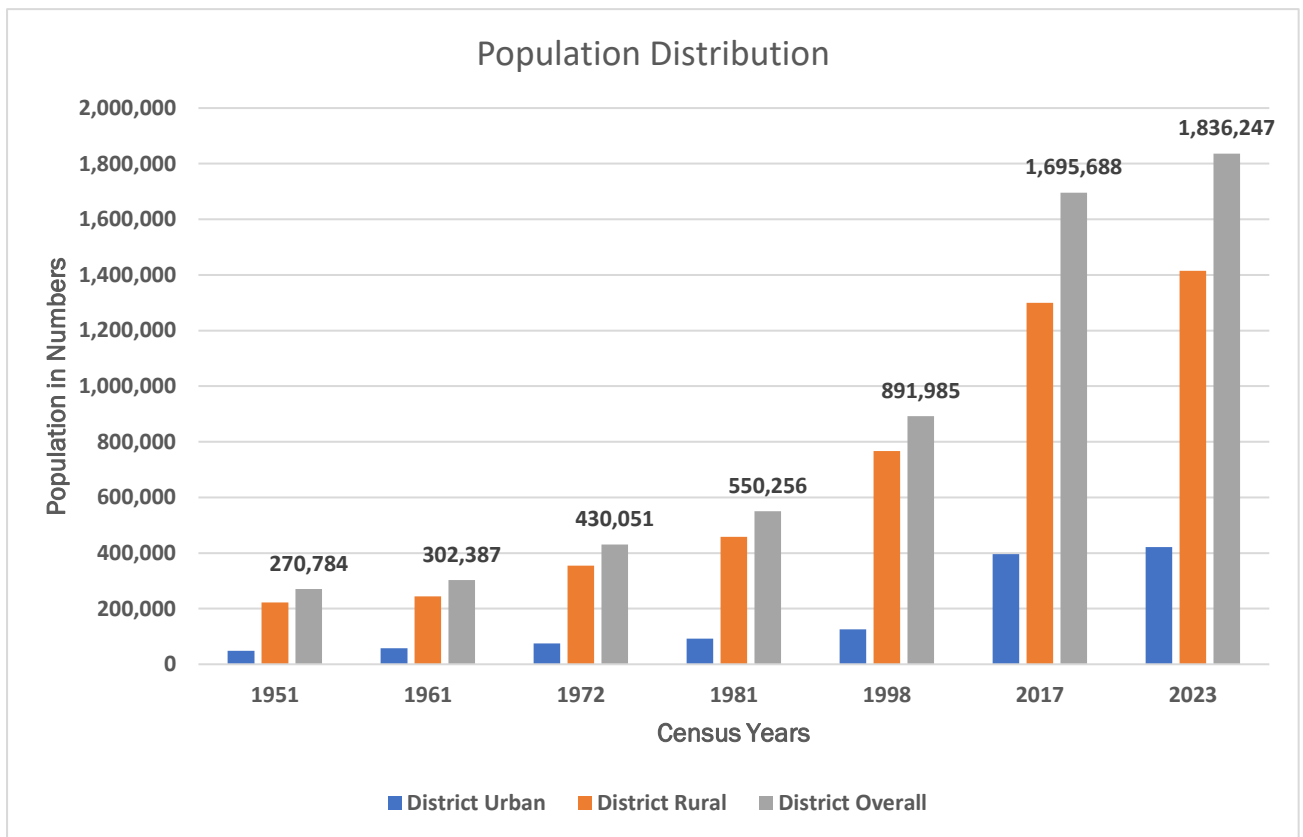


Figure 1-6: District DI Khan Population Distribution - Historical Perspective

1.4.1.1 Age and Sex-Wise Population Distribution

District DI Khan is classified as a “youthful population district,” with 43.30% of its population under 15 years of age and 61.74% under 25 years of age. This trend indicates rapid population growth, especially in rural areas, and highlights upcoming challenges in employment and service delivery. Age-wise, 43.28% of males and 43.32% of females are under 15, while over 61.47% of males and 62.98% of females are under 25.

The details of District DI Khan, including age and sex-wise population distribution, are presented in the Table and graphically represented in the Figure below.

Table 1-2: District DI Khan Age and Sex-Wise Population Distribution⁹

Age (Years)	Male	Male Percentage	Female	Female Percentage	Trans Gender	Total
4 and below	142611	14.92	134,723	15.54	0	276,060
5-9	147,930	15.47	134,137	15.48	0	280,717
10-14	123,436	12.91	106,720	12.31	2	229,124
15-19	100,154	10.48	85,891	9.91	10	185,212
20-24	78,763	8.24	71,466	8.25	9	149,413
25-29	65,754	6.88	62,662	7.23	28	127,810
30-34	58,524	6.12	60,284	6.96	33	118,400
35-39	53,050	5.55	49,162	5.67	26	101,890
40-44	44,195	4.62	39,634	4.57	25	83,526
45-49	32,655	3.42	30,680	3.54	6	63,106
50-54	30,101	3.15	27,955	3.23	6	57,851
55-59	25,510	2.67	21,496	2.48	3	46,871
60-64	19,818	2.07	16,117	1.86	1	35,794
65-69	14,181	1.48	11,060	1.28	0	25,142
70-74	10,663	1.12	8,092	0.93	1	18,692
75 and above	8753	0.92	6,588	0.76	1	15,295
All Ages	956,098	100	866,667	100	151	1,822,916

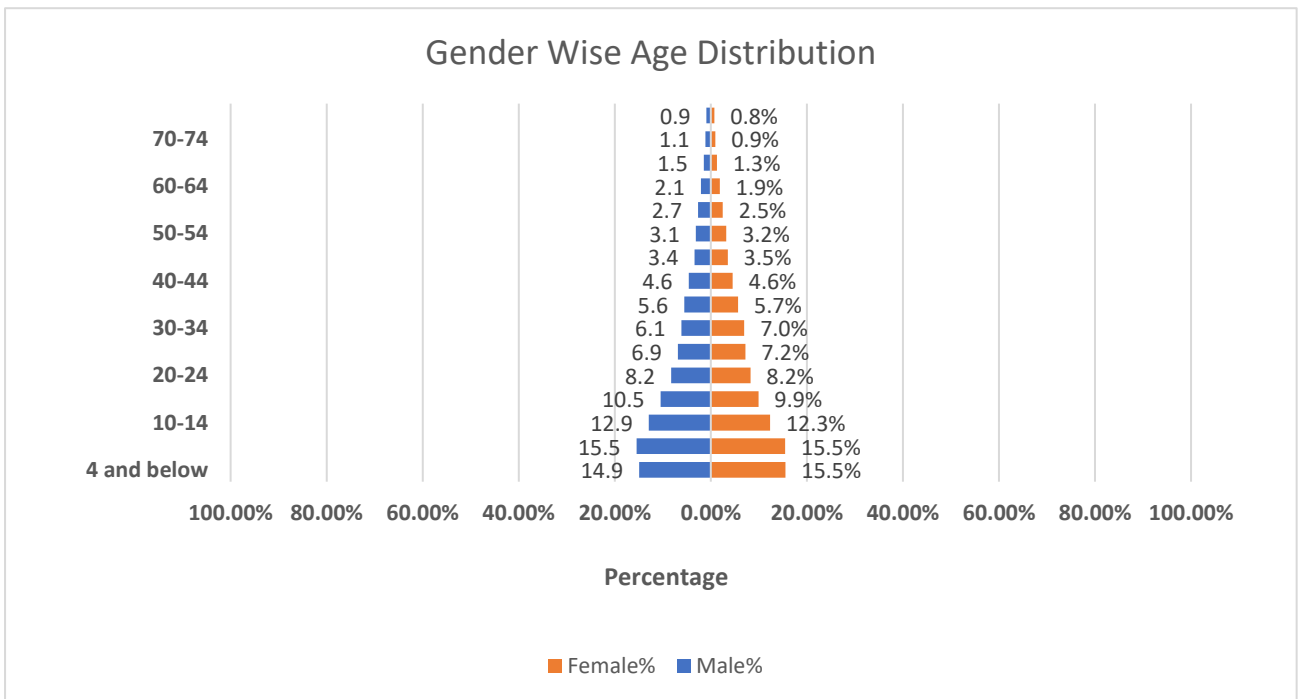


Figure 1-7: District DI Khan Age and Sex-Wise Population Distribution

1.4.2 Population Density

Population density, the number of people per unit area, is vital in urban planning. It guides resource allocation, infrastructure development, and land use design. High density can lead to congestion and pressure on services, while balanced density supports sustainable, livable cities.

The consultant has calculated the population density by dividing the total population by its land area. The formula for calculating population density is:

⁹ https://www.pbs.gov.pk/sites/default/files/population/2023/tables/table_4_kp_districts.pdf

$$\text{Population Density} = \frac{\text{Total Population}}{\text{Land Area in sq. km.}}$$

Since 1951, the population density of District DI Khan has increased at a similar pace to that of Khyber Pakhtunkhwa. In 2023, DI Khan density was 196 persons/sq. km compared to the province's 401. The population density comparison for over the years has been given in Table and graphically shown in Figure below.

Table 1-3: District DI Khan Population Density Compared with Khyber Pakhtunkhwa

Census Period	District D I Khan		Khyber Pakhtunkhwa	
	Population	Density (Person/Sq. Km)	Population	Density (Person/Sq. Km)
1951	270,784	29.90	4,556,545	61.14
1961	302,387	33.39	5,730,991	76.90
1972	430,051	47.49	8,388,551	112.57
1981	550,256	60.77	11,061,328	148.43
1998	891,985	98.51	17,743,645	238.10
2017	1,695,688	187.27	30,508,920	409.40
2023 ¹⁰	1,829,811	196.04	40,856,097	401.57

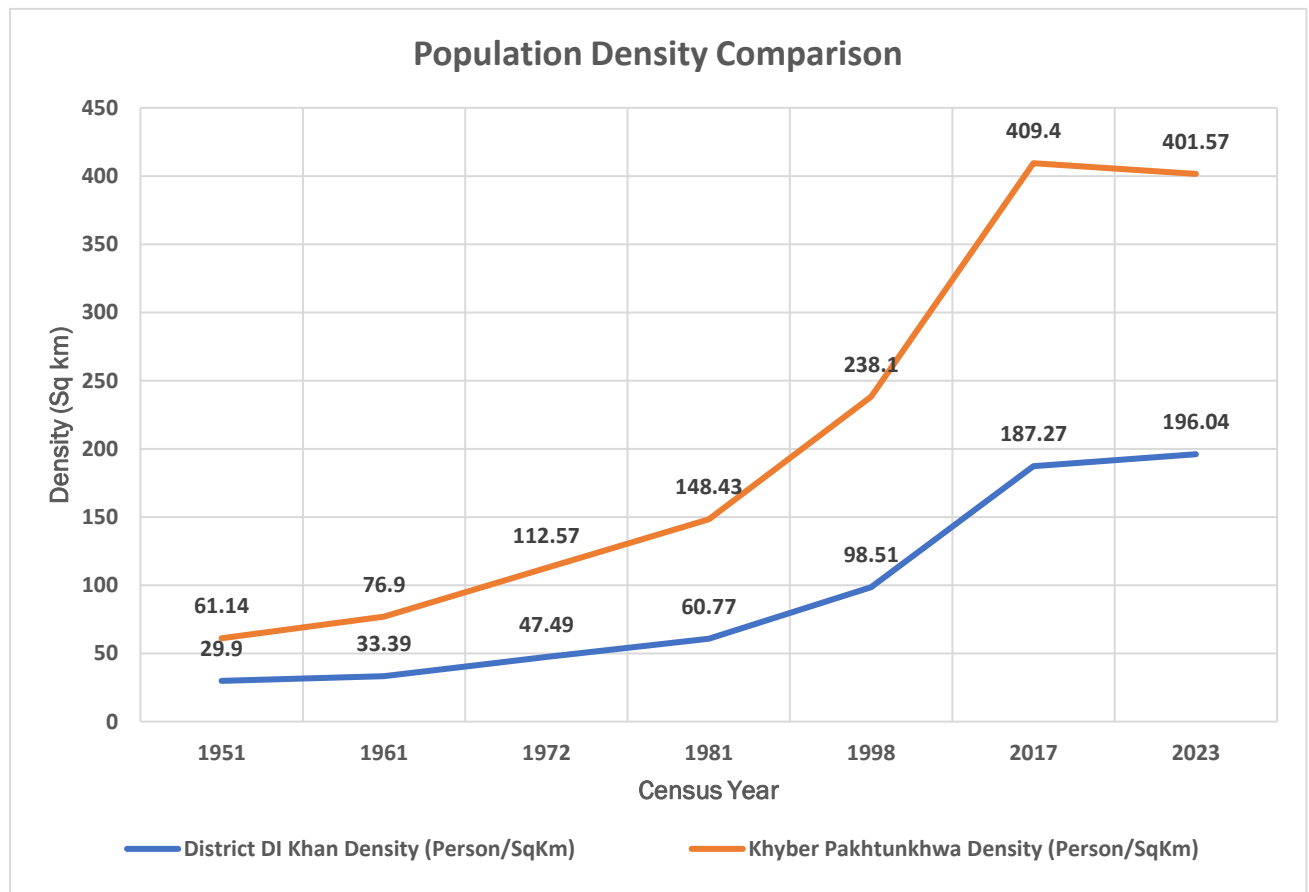


Figure 1-8: District DI Khan Population Density Comparison with Khyber Pakhtunkhwa

1.4.3 Migration

Migration analysis for District D.I. Khan, based on the 2020–21 Labor Force Survey, reveals that most migration is rural-to-rural (76.19%), with a smaller share being urban-to-urban or urban-to-rural (23.81%). In-migration largely originates from South Waziristan (44.44%), Tank (6.35%), and North Waziristan

¹⁰ https://www.pbs.gov.pk/sites/default/files/population/2023/tables/table_1_kp_districts.pdf

(6.35%), reflecting security concerns and livelihood adjustments in adjoining tribal districts. Other contributors include Bannu (6.35%), Lakki Marwat (3.17%), and Kurram (3.17%). Urban inflows are comparatively limited, with migrants from Afghanistan (12.7%), Karachi, Lahore, Rawalpindi, and Quetta each forming smaller shares. These patterns highlight D.I. Khan's strategic role as a migration hub for southern Khyber Pakhtunkhwa, underscoring the need for integrated housing, urban services, and livelihood opportunities to absorb rural migrants and ease pressure on urban centers.

1.4.3.1 Reason for migrations

Migration trends in District DI Khan, mainly rural-to-rural, are driven by security, family relocation, and return to home areas. In-migration stands at 76.19% and out-migration at 71.29%. These shifts impact housing demand, infrastructure, and agricultural land use, highlighting the need for responsive land use planning.¹¹

1.4.4 Employment

The Employment section is essential in the land use plan for DI Khan as it helps align land allocation with the population's employment trends. Based on LFS 2021 and HIS, unemployment in District DI Khan increased from 55.34% (LFS) to 59.61% (HIS). Reliance on agriculture declined from 13.97% to 4.32%, while private sector jobs increased from 4.16% to 7.26%, reflecting shifting employment patterns.

It is important to note that in the HIS data, the percentages represent only about 70% of the population, as students (approximately 30%) were not included in the employment figures. The details of employment in District DI Khan are given in the Table and visually represented in the Figure below.

Table 1-4: District DI Khan Employment Details¹²

Source	Agriculture-Livestock	Business-Trade	Government Job	Labor	Private Job	Others	Transport	Unemployed
Employment From LFS 2021	13.97%	7.71%	3.98%	13.00%	4.16%	1.84%	0.00%	55.34%
Employment From HIS 2023	4.32%	4.75%	3.99%	16.97%	7.26%	1.60%	1.48%	59.61%

¹¹ Pakistan Bureau of Statistics. (March, 2022). Pakistan Labour Force Survey 2020-2021. Micro Data

¹² Calculated from the Labor Force Survey 2020-2021. And Calculated from the Household Survey conducted by the Consultant in January, 2023.

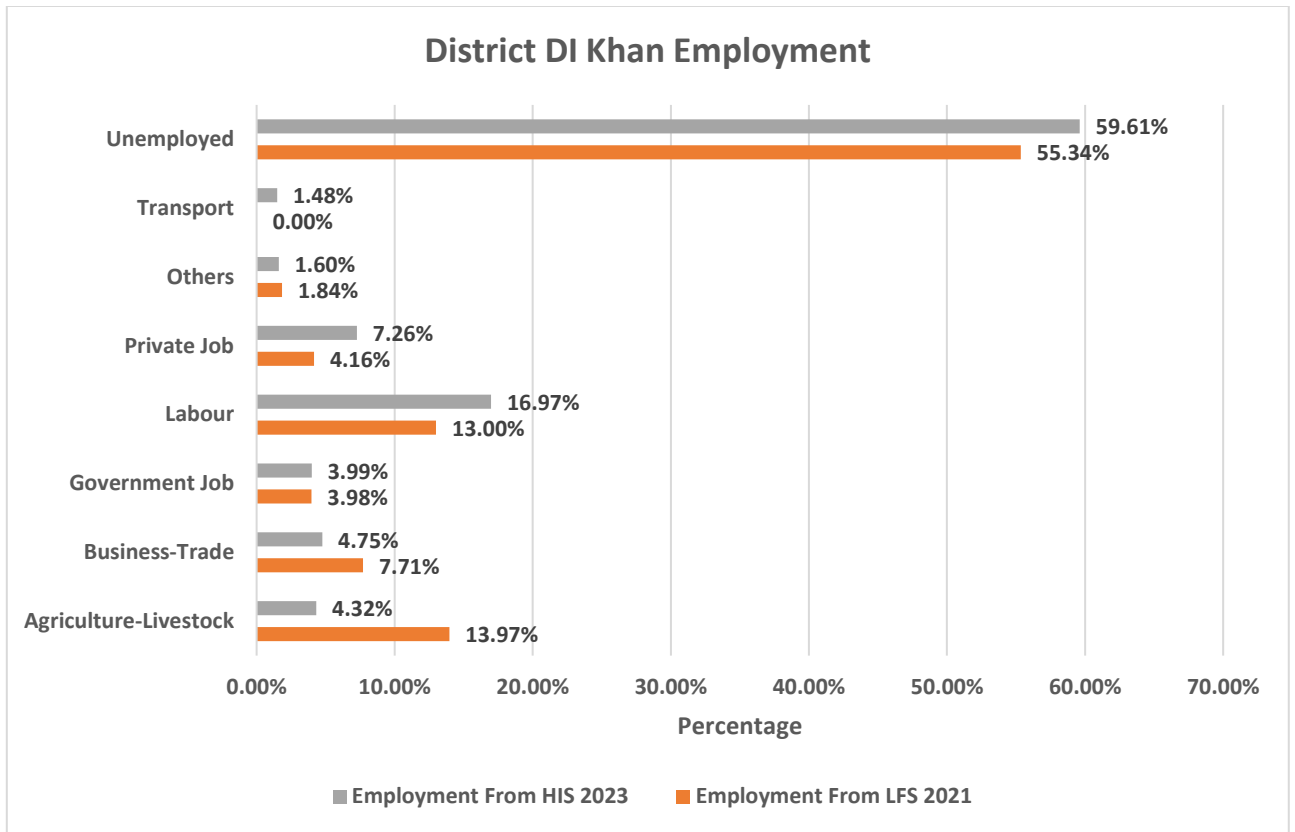


Figure 1-9: District D.I. Khan Employment

1.4.5 Literacy Ratio

A comparison of literacy data for District DI Khan shows inconsistencies across sources, highlighting both progress and challenges. The Census reports a 46.58% overall literacy rate (males 58.14%, females 33.71%). HIS shows 58% overall (males 71%, females 25%), while PSLM reports 53% overall (males 75%, females 29%). This is due to variations in methodology and data collection periods, but such discrepancies stress the importance of using multiple data sources for informed planning and signal areas where focused interventions can further reduce gender disparities in literacy.

Table 1-5: District D.I. Khan Literacy Ratio

Literacy	Male	Female	Overall
Census 2023 ¹³	67.2%	45.5%	57%
HIS 2023	71%	25%	58%
PSLM 2020	75%	29%	53%

¹³ https://www.pbs.gov.pk/sites/default/files/population/2023/tables/table_12_kp_districts.pdf

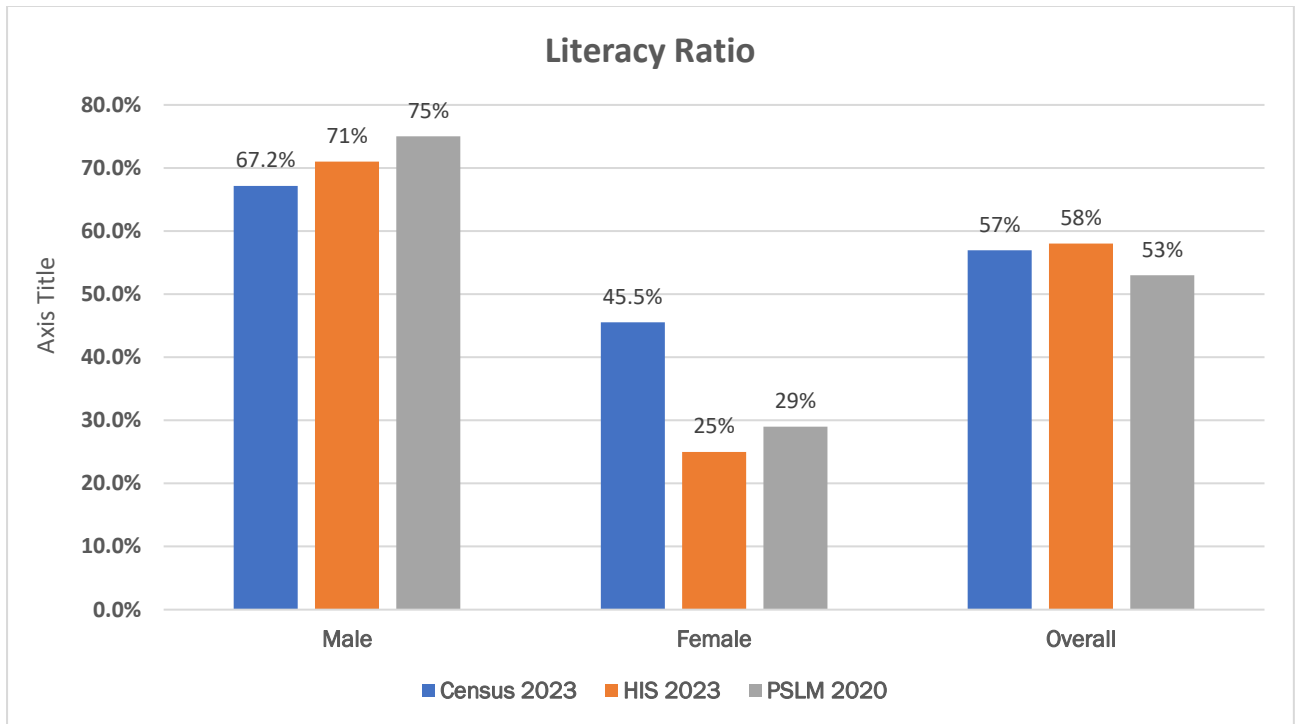


Figure 1-10: District DI Khan Literacy Ratio Comparison

1.4.6 Education Attainment

The Education Attainment data shows variation in education levels across four sources: Census 2017, HIS 2023, LFS 2021, and PSLM 2020. According to the Census, HIS and LFS, the proportion of people with education below matric remains highest at 12.26, 21.97% to 35.98%, respectively. Matric and intermediate levels show moderate representation, while technical diploma holders are fewer. Graduate and postgraduate levels remain low but show slight improvement in HIS 2023. Overall, the total educated population has gradually increased from 43.37% (2017) to over 48.27% (2020–2021).

The district-wise breakdown of the educational attainment is given in the **Table** and represented in the **Figure** below:

Table 1-6: District DI Khan Education Attainment

Education Level	Census 2023 ¹⁴	HIS 2023 ¹⁵	LFS 2021 ¹⁶	PSLM 2020 ¹⁷
Below Matric	25.36%	21.97%	35.98%	26.45%
Matric	5.77%	10.31%	7.20%	8.10%
Intermediate	3.43%	0.82%	4.15%	3.51%
Technical Diploma and Other	0.69%	5.27%	0.81%	0.49%
Graduate	1.58%	6.07%	0.12%	2.78%
Master and above	2.54%	0.44%	0	1.64%
Total	39.37%	44.88%	48.27%	42.97%

¹⁴ https://www.pbs.gov.pk/sites/default/files/population/2023/tables/table_13_kp_districts.pdf

¹⁵ Calculated from the Household Survey conducted by the Consultant in January, 2023.

¹⁶ Calculated from LFS 2020-2021 Microdata, Pakistan Bureau of Statistics.

¹⁷ Calculated from PSLM 2019-2020 Microdata, Pakistan Bureau of Statistics.

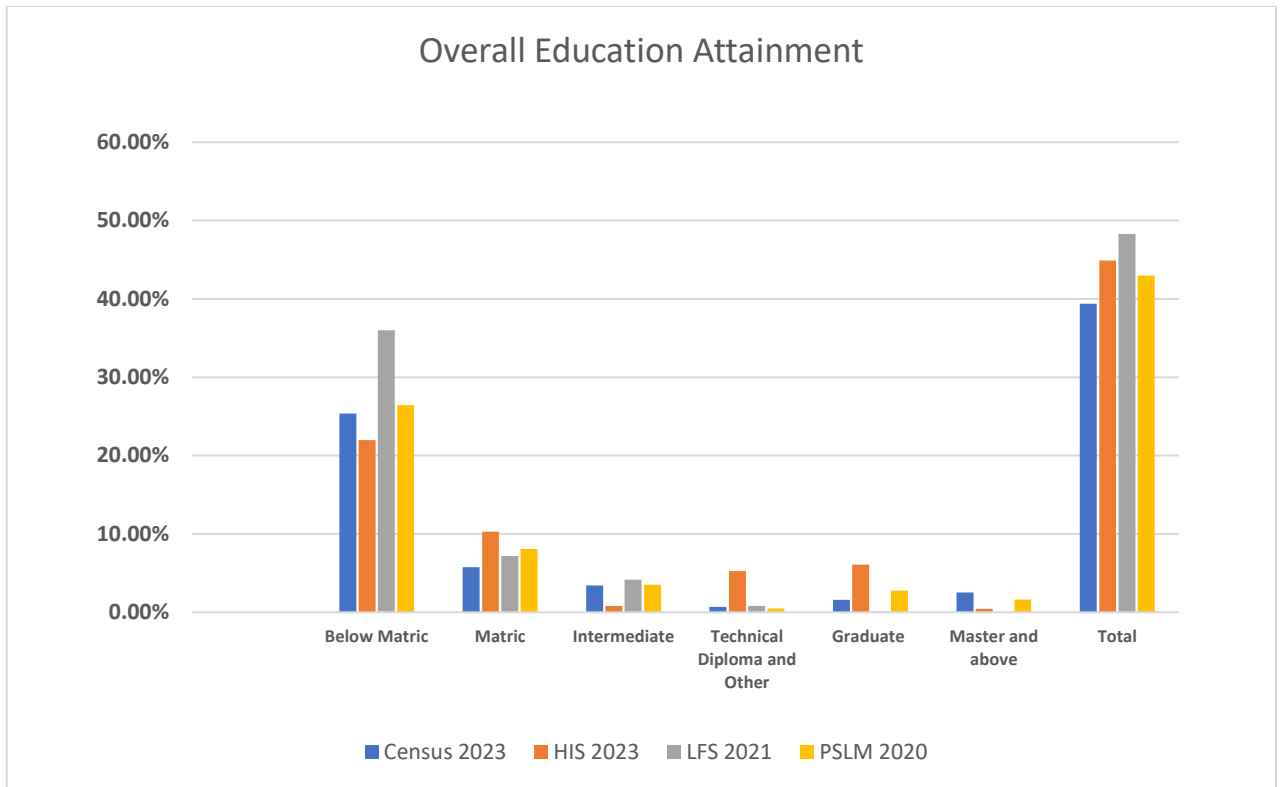


Figure 1-11: District DI Khan Education Attainment

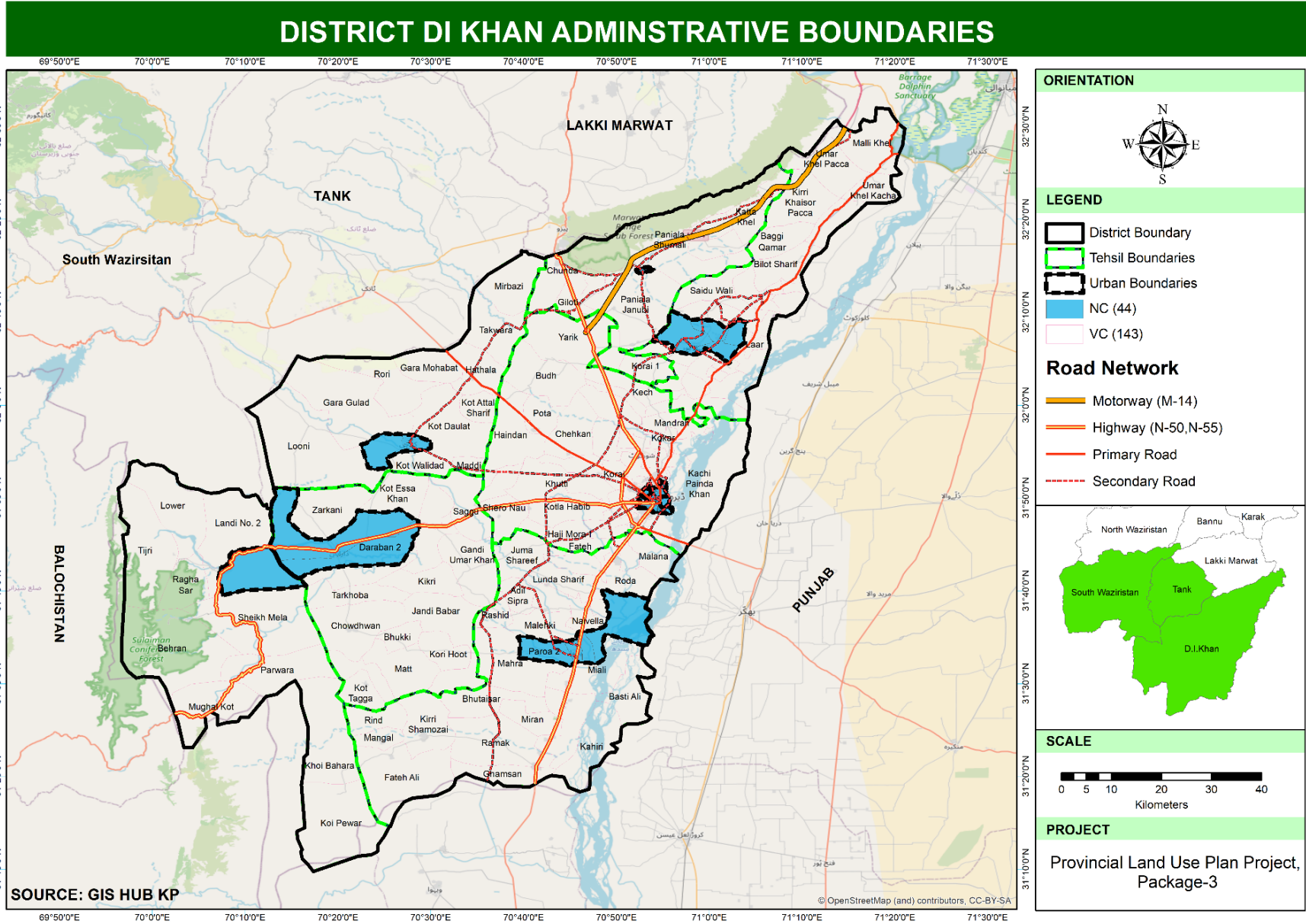
1.5 Administrative Setup

Dera Ismail Khan, commonly known as DI Khan, is a prominent district in the southern region of Khyber Pakhtunkhwa, Pakistan; District DI Khan has been divided into seven tehsils, each contributing uniquely to the district's dynamics. The urban fabric is prominent across various tehsils, encompassing urban lifestyle. There are seven urban areas located in the district, every tehsil has one urban area in district DI Khan.

Tehsil Dera Ismail Khan, covering approximately 1,451.46 square kilometers (16.03% of the district), includes the urban center of DI Khan city, which serves as the district's administrative and commercial hub. Tehsil Paharpur spans 966.62 square kilometers (10.7%), while Tehsil Kulachi covers 1,138 square kilometers (12.6%). Tehsil Paroa, the largest in area, encompasses 1,733.1 square kilometers (19.1%). Tehsil Panyala accounts for 745.1 square kilometers (8.22%) making it the smallest of all tehsils. Additionally, Tehsils Darazinda and Daraban cover areas of 1,662.4 square kilometers (18.3%) and 1,358.4 square kilometers (15%), respectively.

Table 1-7: District D.I. Khan Tehsil-Wise Area

Tehsil	Area (Sq. Km)	Percentage
DI Khan	1451.46	16%
Paharpur	966.62	10.7%
Kulachi	1,138.01	12.6%
Paroa	1733.1	19.14%
Panyala	745.11	8.22%
Darazinda	1662.48	18.34%
Daraban	1358.47	15%
Total	9055.25	100%



Map 1-7: Administrative Boundaries of District D.I Khan

1.6 Urbanization & Hierarchy of Human Settlements

Urbanization refers to the process by which the urban population increases as compared to rural areas, due to economic development and industrialization. As per international literature, multiple factors contribute to urbanization in developed and developing countries. Natural increase in urban population refers to growth due to a surplus of births over deaths, driven by improved healthcare, sanitation, and living standards, leading to population growth, increased service demand, economic boost, and social impact. Migration from rural to urban areas involves people relocating for better opportunities, contributing to population redistribution, economic growth, infrastructure demand, and social integration. Conversion of rural/peri-urban areas to urban involves transforming semi-rural landscapes due to urban expansion and demographic pressure, resulting in spatial growth, land use changes, environmental impact, and the need for effective planning and management.

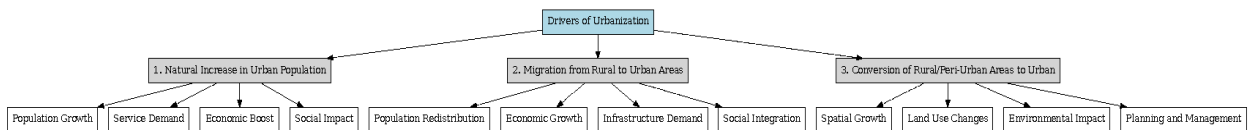


Figure 1-12: Drivers of Urbanization

1.6.1 Urbanization Trend in District D.I. Khan

District D.I. Khan showed urban growth, increasing from 17.94% in 1951 to 23.37% in 2017, before declining to 20.48% in 2023, possibly due to lower growth rate of urban areas as compared to rural. But between this period, it has increased initially after which constantly decreased till 1998. After which it recorded approximately 10% increase in the urban proportion of the population followed by a decrease in the overall urban percentage in 2023. Nationally, Pakistan has seen a much faster urbanization trend, with the urban population rising from 17.74% in 1951 to 38.88% in 2023, reflecting economic development, migration, and infrastructure expansion. The **Table** and **Figure** below show the urbanization trend in District D.I. Khan based on data obtained from the Population Censuses of Pakistan spanning from 1951 to 2023.

Table 1-8: Urban vs Rural Proportion in District D.I. Khan (Historical)

Census Year	District D.I. Khan	
	Urban	Rural
1951	17.94%	82.05%
1961	19.13%	80.86%
1972	17.42%	82.57%
1981	16.64%	83.35%
1998	14.10%	85.89%
2017	23.37%	76.62%
2023	20.48%	79.52%

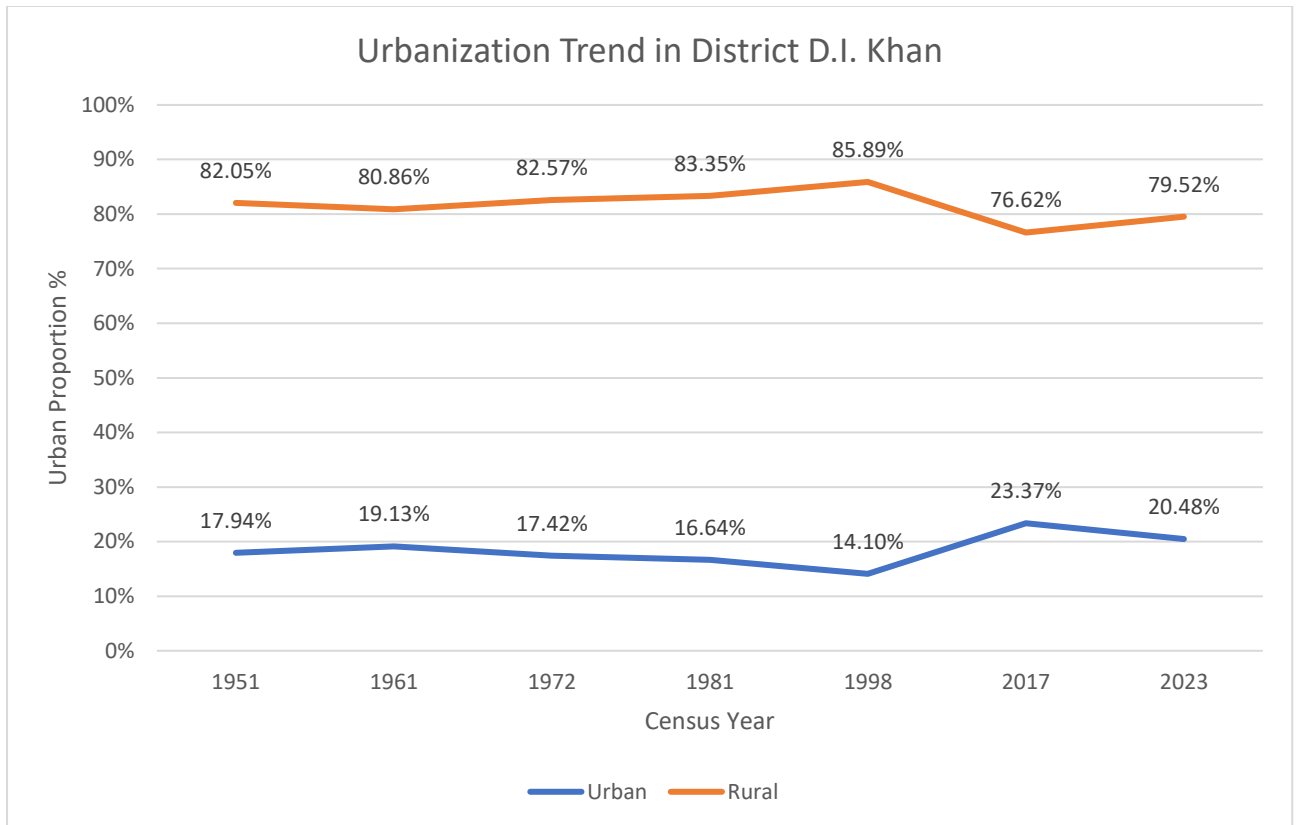


Figure 1-13: Urbanization trend in District D.I. Khan

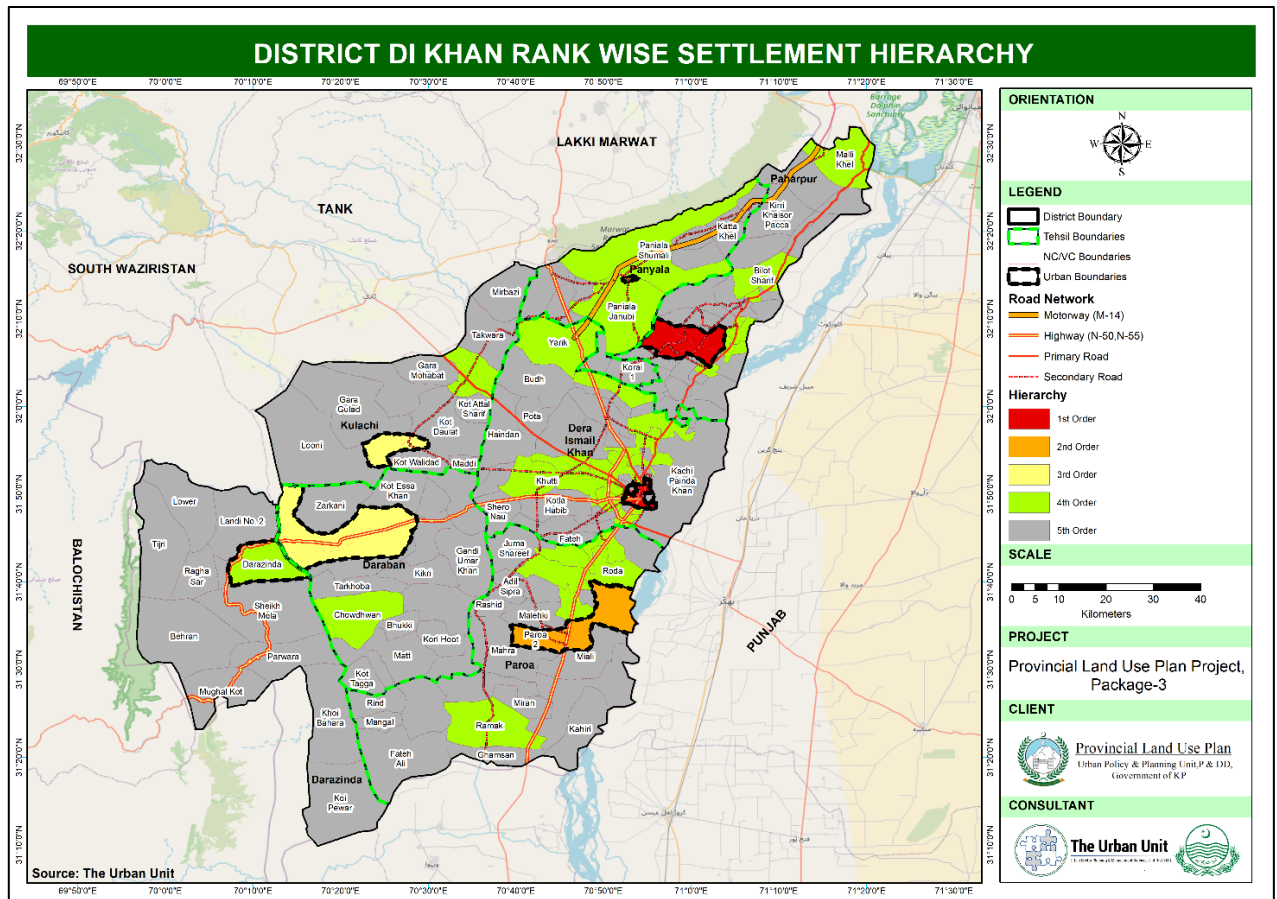
1.6.2 Defining Characteristics and Scores

In addition to demographic analysis, settlement functional analysis and land sprawl analysis have been conducted for effective and feasible strategies for hierarchical distribution. Criteria were then prepared for District D.I. Khan, and scoring was applied for each settlement based on the characteristics. Characteristics include population, density, health and educational facilities, level of services, district links. Weight was assigned to each criterion based on data analysis, professional judgment.

According to the availability of services and other factors mentioned above, the D.I. Khan district’s settlement hierarchy is split into five categories: The score range of each category has been given: first order (>20), second order (20-14), third order (14-10), fourth order (10-5), and fifth order (<5).

1.6.3 District D.I. Khan Settlement Hierarchy

Functional analysis method helps planners understand settlement patterns based on functions, adequacy, deficiencies, and upgrade potential, and threshold values for services. Various methods exist for ranking centers; the simplest is scoring each settlement and analyzing. The functional matrix serves as an inventory. Scores were aggregated to establish the settlement hierarchy in **Task-B Background Studies and Data Analysis** and shown in the **Map** below for district D.I. Khan.



Map 1-8: Rank Wise Settlement Hierarchy

The 1st order settlements contain densely populated and built-environment infrastructure which are urbanized places. In District D.I. Khan, the Dera Ismail Khan and Paharpur MC are 1st order settlement followed by a single 2nd order settlement of Paroa MC. 3rd order settlements contain VC Kotla Saidan-3, Kulachi MC and Daraban TC. The 4th and 5th order settlements are those that are the smallest in this hierarchy of human settlements, remote from other areas, and without access to necessities of life like water supply, power, education, and other things. They consist of a very modest number of buildings and are much smaller than cities. There are thirty-seven 4th order and one hundred and eight 5th order settlements in District D.I. Khan.

1.6.4 Settlements to be Urbanized

To identify areas that are likely to be urbanized over the next 20 years, a comprehensive evaluation has been conducted using demographic analysis, settlement hierarchy analysis, functional matrix analysis, urban sprawl change detection, and critical review of existing land use. The existing urban areas in District D.I. Khan are well distributed, and based on the analysis, no new urban areas are required within the plan period. The district comprises seven tehsils, each with its urban center functioning as the administrative, health, education, and trade hub for the tehsil. Sufficient land is available within each urban center's built-up area to accommodate population growth over the next 20 year except D.I. Khan MC and Panyala TC whose urban boundaries will expand to accommodate the anticipated population increase.

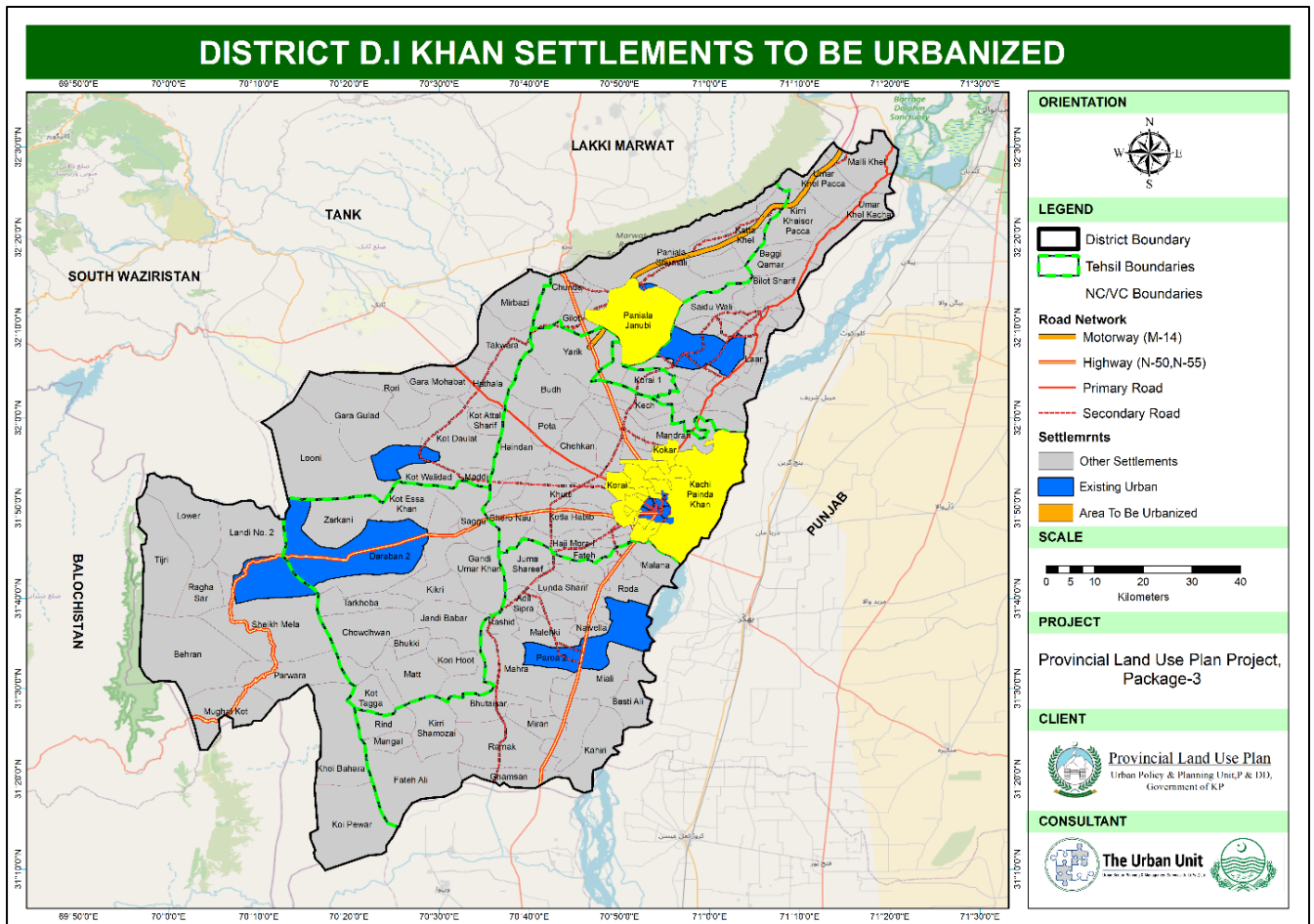
D.I. Khan MC, the primary urban center, is projected to house a population of 1.45 million by the end of the plan period in 2045. Among these settlements, Kachi Paid Khan, located to the southeast of the city, is likely to be partially urbanized, though the Indus River will divide the village council into two distinct parts. Other than this, VC Kokar located towards the North on Mianwali-D.I. Khan Road will also be partially urbanized.

In the case of Panyala TC, the existing urban area will be expanded towards the south and southwest where Panyala Janubi VC due to the presence of Hakla-D.I. Khan Motorway. Based on urban growth trend

analysis, the settlement hierarchy, and a critical review of existing land use, the settlements listed below in **Table** are expected to be urbanized over the next two decades followed by **Map** visualizing these settlements to be urbanized.

Table 1-9: Settlements to be Urbanized

S. No	Settlements	Urbanization Status
1	Aara	Fully
2	Ejaz Abad	Fully
3	Himmat	Fully
4	Jhok Qureshi	Fully
5	Kachi Paidn Khan	Partially
6	Kokar	Partially
7	Korai	Fully
8	Kotla Saidan-1	Fully
9	Kotla Saidan-2	Fully
10	Kotla Saidan-3	Fully
11	Lachra	Fully
12	Muryali	Fully
13	Nawab	Fully
14	Ratta Kulachi-1	Fully
15	Ratta Kulachi-2	Fully
16	Shor Kot	Fully
17	Singhar	Fully
18	Zafar Abad-1	Fully
19	Zafar Abad-2	Fully
20	Panyala Janubi	Partially



Map 1-9: District D.I. Khan settlements to be urbanized

1.6.5 Delineation of Proposed Urban Centers Planning Boundary

Delineating urban boundaries is essential for sustainable land use and growth management. Clear boundaries support compact, high-density development, optimize infrastructure use, control unplanned expansion, and protect rural land. They also guide zoning, resource allocation, and future development, reducing costs and environmental impact. The figure below outlines the consultant’s process for defining proposed urban boundaries.

For existing urban areas undergoing boundary expansion, neighboring rural areas (Village Councils) were included based on the proportion of rural area and population to be added to the existing Neighborhood Council (NC). This helped in calculating the total area required during the plan period.

For rural areas transitioning to urban (comprising more than one Village Council), the population of each VC was proportionally calculated to determine the area requirement for each new urban settlement. This ensured that boundaries matched the population-based land requirement and avoided over- or underestimation.

The process of delineating the proposed urban boundary began with the already identified compact built-up boundary. A tentative boundary was drawn in the direction of physical growth to include recent developments and planned projects such as community centers, colleges, and universities that contribute to the socio-economic fabric of the urban area followed by a regularly shaped boundary along physical features. Once delineated, the proposed urban boundaries were assessed against area requirements to ensure proper space utilization for future development thus finalizing the urban area boundary delineation. The process is shown below in **Figure**.

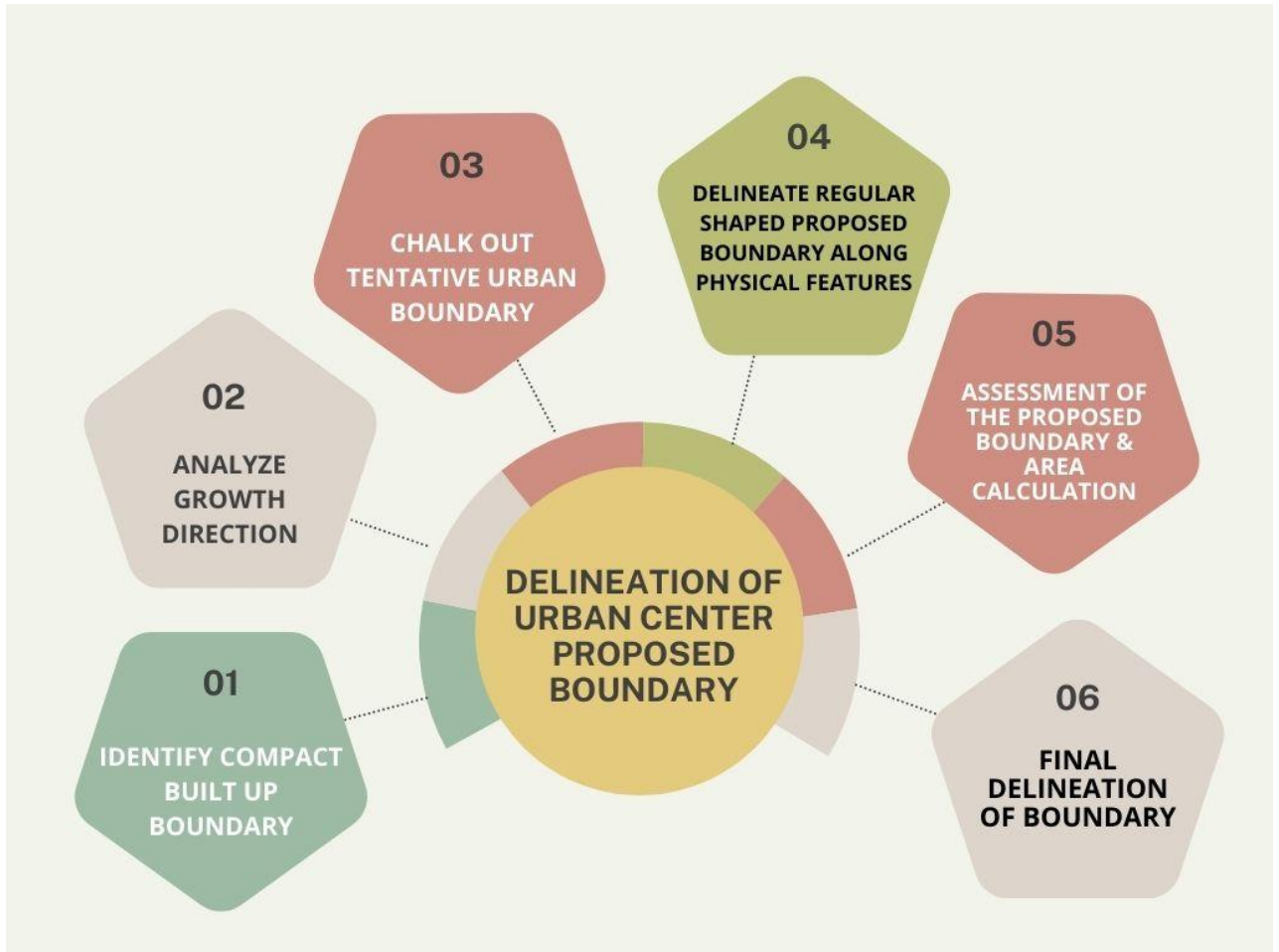


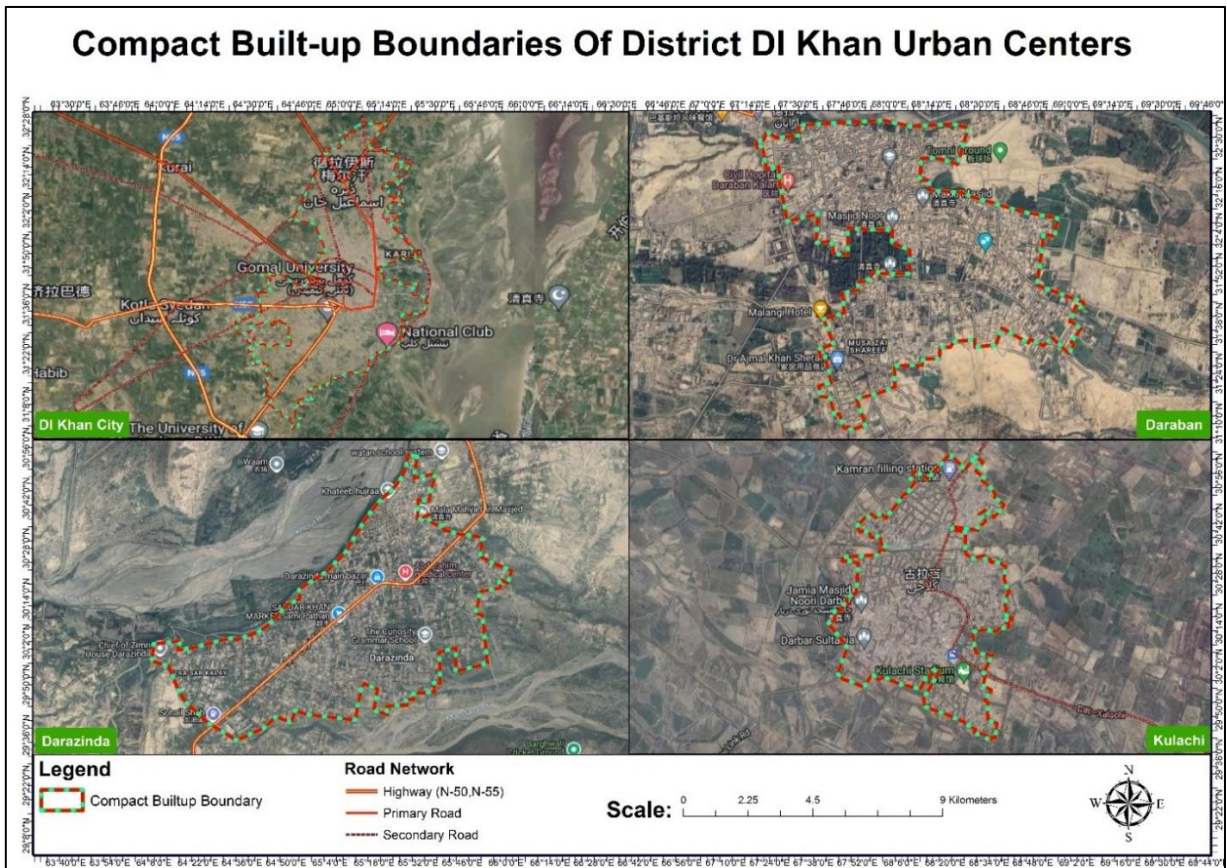
Figure 1-14: Urban Center Proposed Boundary Delineation Process

1.6.5.1 Compact Built-up Boundaries

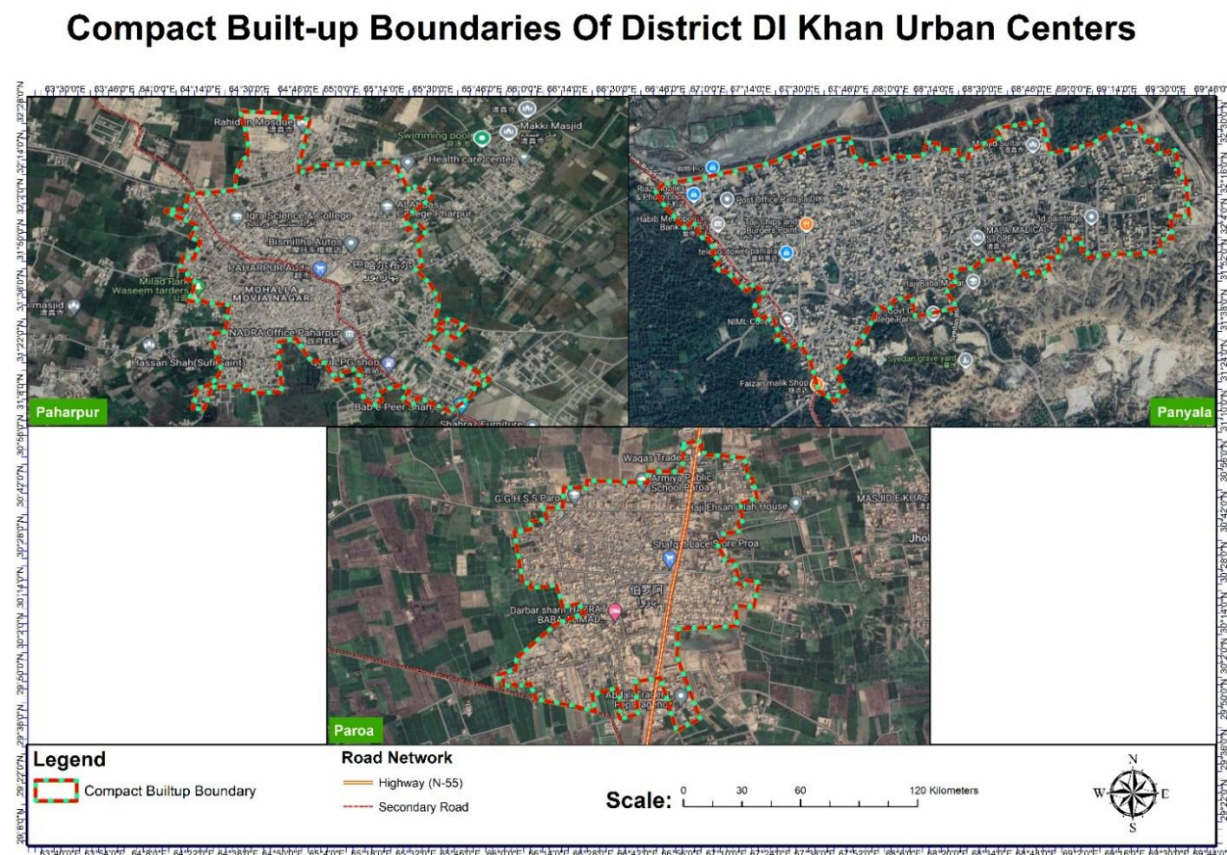
The first step in delineation of planning boundary is the demarcation of compact built-up boundaries (CBB), identifying continuous urban areas to manage sprawl and promote sustainable development. CBBs support efficient infrastructure planning by reducing costs and improving services. Boundaries were drawn using existing land use maps, enclosing dense, mixed-use development and following natural or man-made features like roads and water bodies. In district D.I. Khan, seven CBBs have been marked for all existing urban centers, shown below in the **Map** below whereas the **Table** shows the area of compact built-up boundaries.

Table 1-10: Compact Built-up Boundaries Area (hectares)

Name	Area (Hectare)
D.I. Khan MC	2817.56
Paharpur MC	167.56
Parao MC	142.38
Kulachi MC	218.01
Panyala TC	74.02
Daraban TC	136.67
Darazinda TC	162.18



Map 1-10: Compact Built-Up of district D I Khan Urban Centers



Map 1-11: Compact Built-Up of district D I Khan Urban Centers

1.6.5.2 Growth Direction

1.6.5.2.1 D.I. Khan MC

Growth trend analysis of D.I. Khan MC shows major expansion towards North, South and West directions. The major attraction to the North is D.I. Khan-Mianwali Road while to the West, Indus highway (N-55) and D.I. Khan-Tank Road has attracted most of the development. To the South and Southwest of the urban area, the development is influenced by the presence of D.I. Khan-Quetta Highway (N-50) and continuation of N-55 which runs through Parao tehsil downwards. The city sprawls into the peri-urban areas mostly in all directions except the east side where the river Indus is passing bounding the existing urban limits.

The urban sprawl is mapped temporally to study growth potential, direction, and patterns of urban growth. Urban built-up extents are marked for the past and present years at intervals of different years, which are 2004, 2014, and 2025. The purpose of marking the urban expansion of the project area is to identify the trend of sprawl of the urban built-up areas onto the surrounding natural and agricultural lands. It helps put a limit on how far out the urban area should expand. Satellite urban extent mapping provides a fundamental dataset for analyzing urban land expansion and the relevant environmental or socioeconomic drivers and impacts. The list of VC's surrounding D I Khan existing urban boundary that are in the direction of growth are **Tabulated** below.

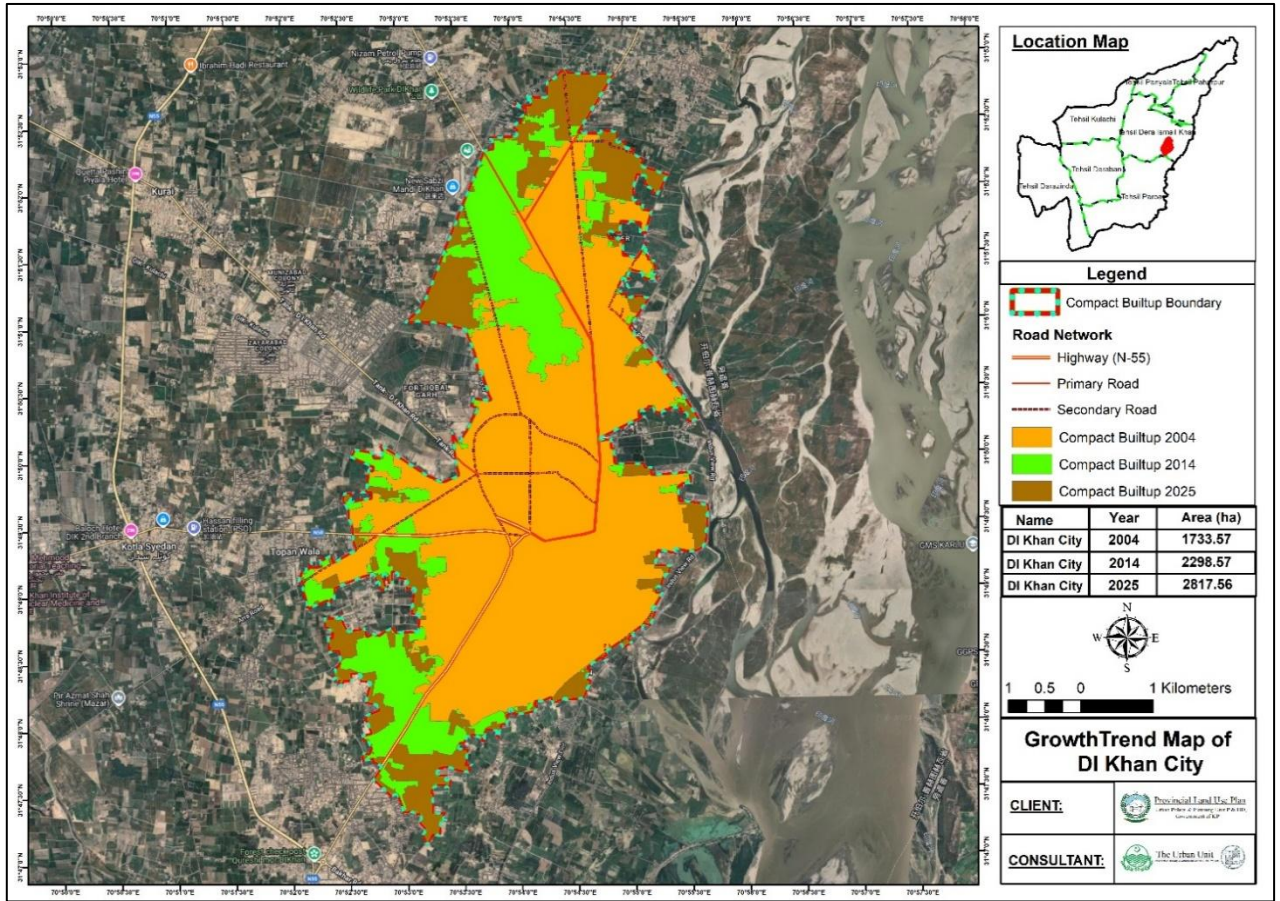
Table 1-11: VCs Surrounding DI Khan Existing Urban

VC	Direction	VC	Direction	VC	Direction
Himmat	North to East	Muryali	South to West	Kotla Saidan 2	West, & Northwest
Singhar		Jhok Qureshi		Kotla Saidan 3	
Kachi Painda Khan		Ejaz Abad		Zafar Abad 1	
Ratta Kulachi 1		Aara		Zafar Abad 2	
Kokar		Nawab		Lachra	
		Kotla Saidan 1		Ratta Kulachi 2	
				Korai	
				Shorkot	

From 2004 to 2014, the built-up area of DI Khan City expanded from 1733.57 hectares to 2298.57 hectares, reflecting a 32% growth. This expansion continued, reaching 2817.56 hectares by 2024, marking a further 22.6% increase. Details are **Tabulated** below followed by **Map** showing land use changes over time.

Table 1-12: Built-Up Area Change Detection 2005-2024

Category	2004	2014	2025
Area (Hectare)	1733.57	2298.57	2817.56
Change	-	32%	22.6%



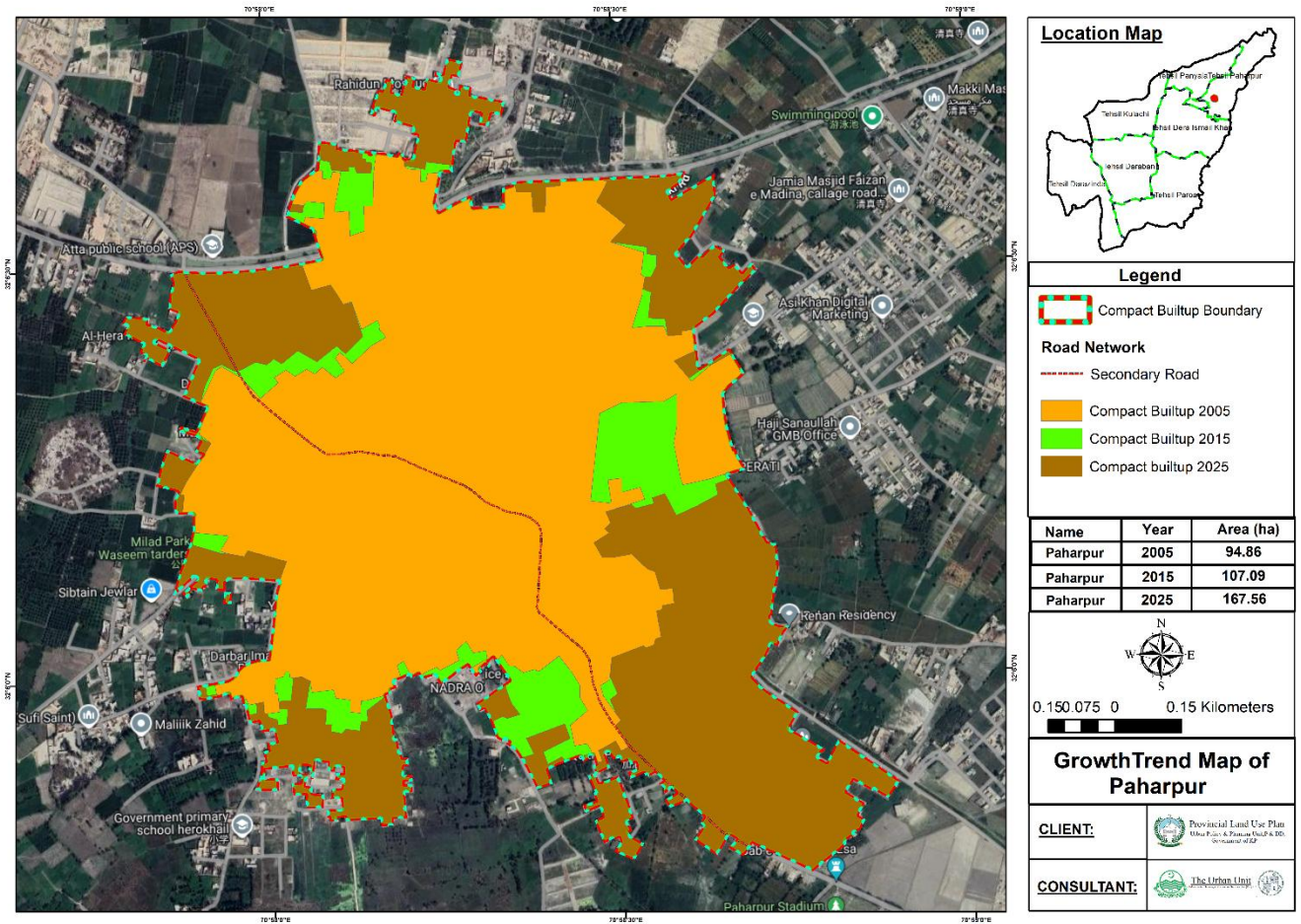
Map 1-12: D.I. Khan MC Change Detection Analysis

1.6.5.2.2 Paharpur MC

Urban growth trend of Paharpur Urban is analyzed based on the Historical Imageries of 2005, 2015, 2025 available on Google Earth. In 2005, the compact built-up area is relatively limited, concentrated in the city's core, covering an area of 94.86 hectares. By 2015, the urban area expanded to 107.1 hectares, showing a growth of 13%. By 2025, the urban area had grown to 167.56 hectares, showing a growth of 56% from 2015. Overall, 76% growth has been recorded over the last 2 decades.

The **Map** shows the growth trend from 2005 to 2025, which shows significant outward expansion, especially in the southern and eastern parts of Paharpur. The growth reflects urban sprawl primarily in the northern, southern, and southwestern directions, where new infrastructure and roadways encouraged the development of residential and commercial areas. The presence of major roads and highways likely facilitated the growth, with the city expanding along these accessible routes.

Looking ahead, Paharpur's future growth potential lies in the Southern where open land remains available. Northern areas may continue to see infill development, while the eastern region could experience additional growth with further infrastructural improvements. Strategic urban planning will be essential to support this expansion and manage resources effectively.



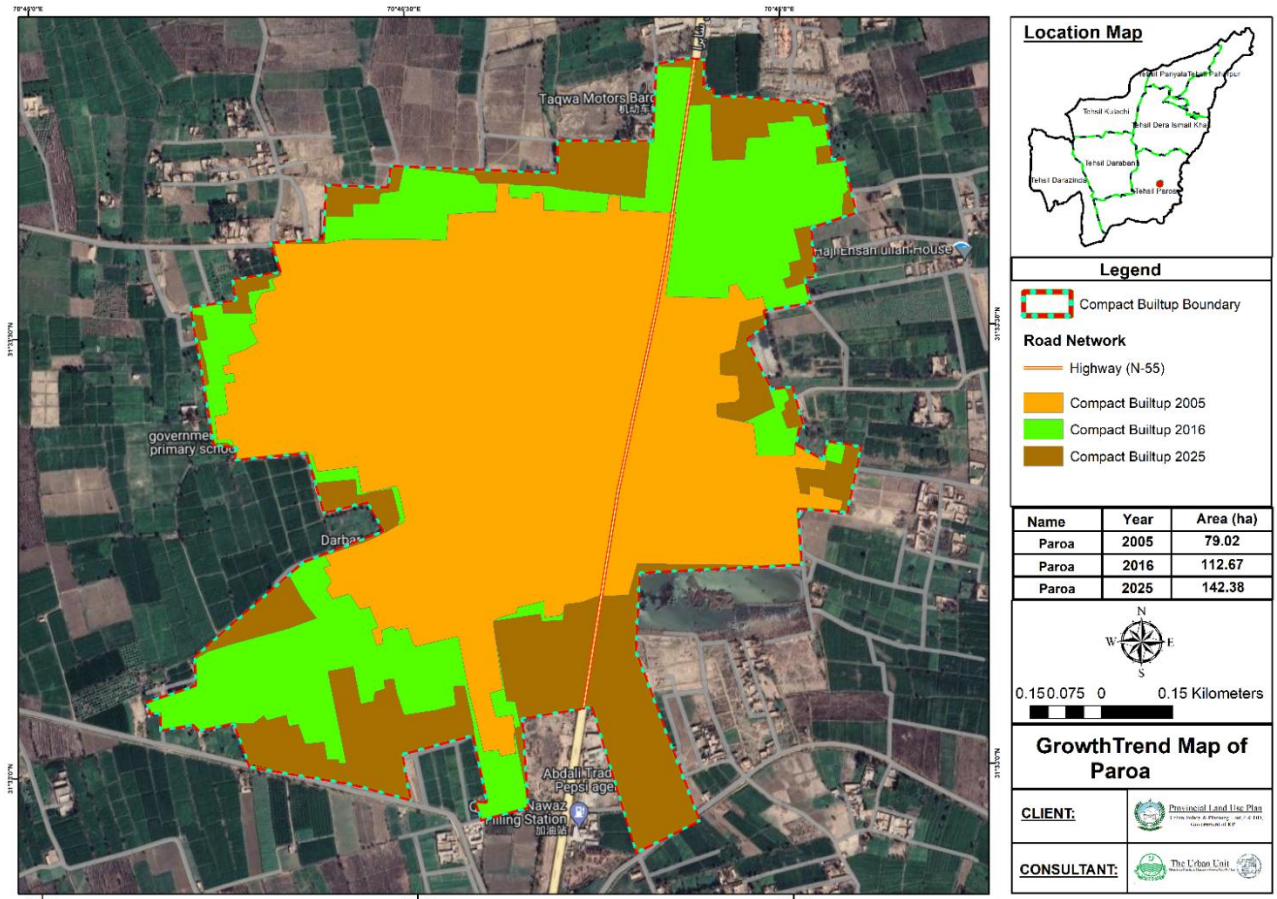
Map 1-13: Paharpur MC growth trend through the years

1.6.5.2.3 Paroa MC

The urban growth trend of Paroa Urban is analyzed using historical imagery from 2005, 2016, and 2025. In 2005, the compact built-up area covered 79.02 hectares. By 2016, this area had expanded to 112.67 hectares, marking a growth of 42.6%. Further development occurred by 2025, with the built-up area reaching 142.38 hectares, reflecting a significant increase of 27.4% since 2016 and 81.6% over the last 2 decades.

The **Map** indicates that between 2005 and 2025, urban growth occurred mostly toward the South, as the city expanded along major roads, utilizing the available land near these areas. From 2016 to 2025, the South, Southwest and North, where infrastructure development and new road connections facilitated further expansion. These areas became important hubs for residential and commercial activities, supported by the accessibility provided by highways and primary roads.

Looking ahead, Paroa's future growth potential lies in the southern where open land remains available. Northern areas may continue to see infill development, while the eastern region could experience additional growth with further infrastructural improvements. Strategic urban planning will be essential to support this expansion and manage resources effectively.



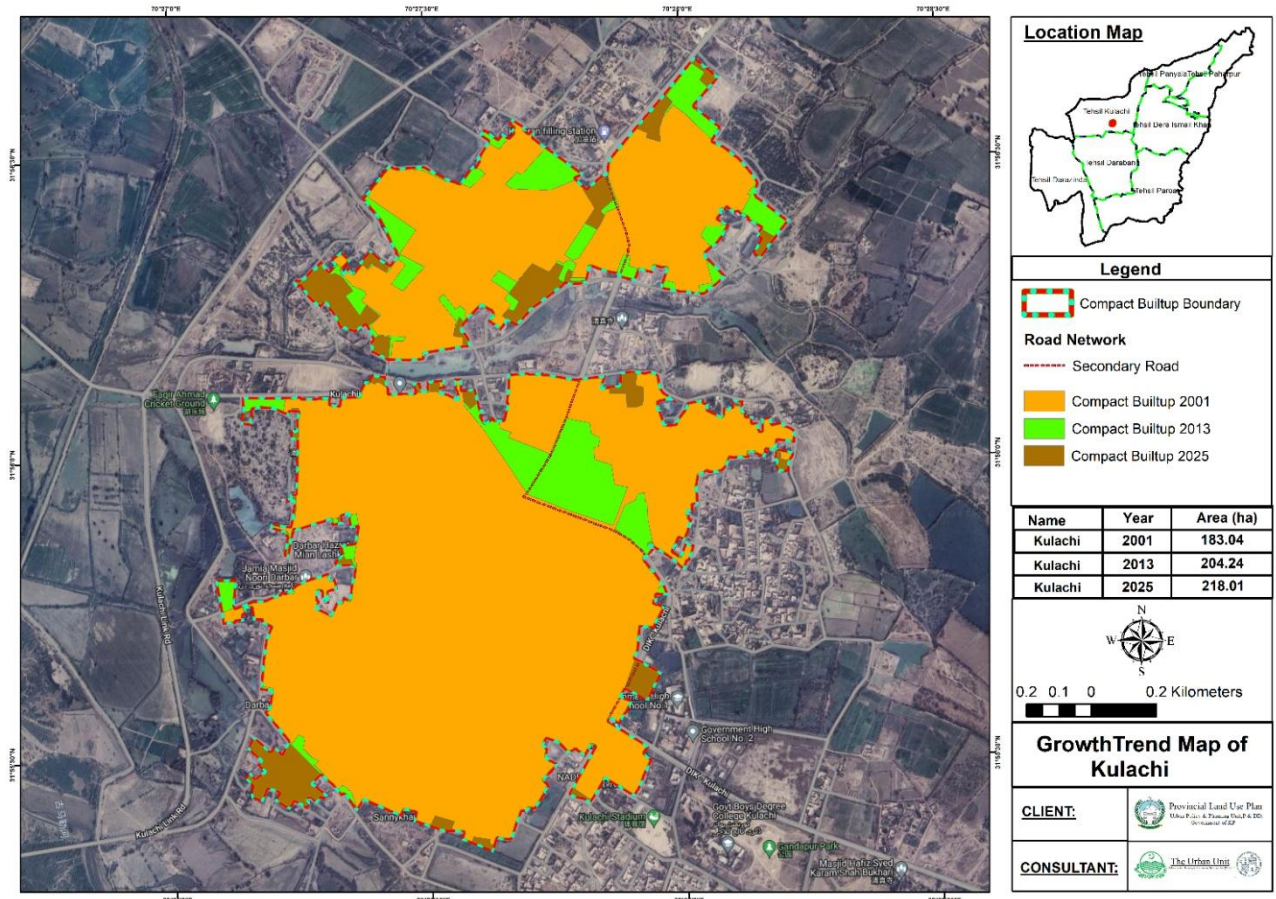
Map 1-14: Paroa MC growth trend through the years

1.6.5.2.4 Kulachi MC

The urban growth trend of Kulachi Urban is analyzed using historical imagery from 2001, 2013, and 2025. In 2001, the compact built-up area covered 183.04 hectares. By 2013, this area had expanded to 204.24 hectares, marking a growth of 11.6% over 12 years. By 2025, with the built-up area reaching 218 hectares, reflecting an increase of 7% since 2013 and overall 19% increase in the past 24 years.

The **Map** indicates that between 2001 and 2013, urban growth occurred mostly toward the North utilizing the available land near these areas. From 2013 to 2025, the marked zones show minimal growth all around where infrastructure development and new road connections facilitated expansion.

Looking forward, future growth potential for Kulachi Urban seems strongest in the northern and northeastern regions, where there remains available land for further urbanization. The western part of the city may also see more infill development as the road networks continue to improve. Proper urban planning will be essential to accommodate the growing population and ensure the city’s infrastructure can support this ongoing expansion.



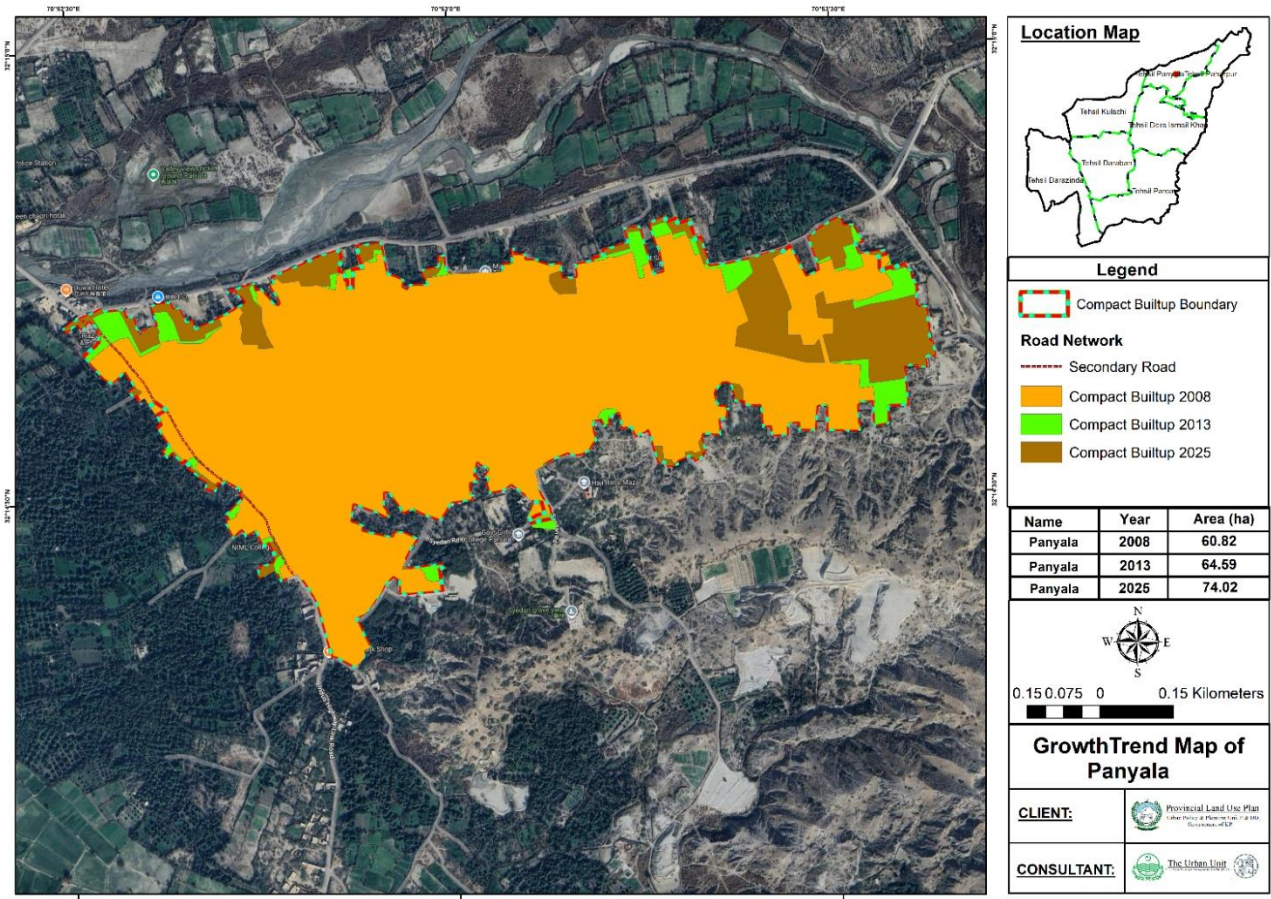
Map 1-15: Kulachi MC growth trend through the years

1.6.5.2.5 Panyala TC

The urban growth trend of Panyala Urban has been analyzed starting from 2008 due to the unavailability of earlier images. In 2008, the compact built-up area was 60.82 hectares which by 2013 increased to 64.59 hectares, reflecting limited growth of 6% during this period. However, by 2025, the urban area expanded significantly to 74.02 hectares, marking a notable increase of 15% since 2016 and overall, 22.4% from 2008.

The **Map** shows that between 2008 and 2025; the city saw moderate expansion primarily in the eastern regions. The growth during this period was constrained, possibly due to the topography or lack of significant infrastructure development. The construction of new infrastructure and improved connectivity appear to have driven this accelerated growth.

Looking ahead, Panyala's future growth potential lies primarily in the northern and eastern regions, where further development is likely. The limited expansion observed in the past suggests that careful urban planning will be necessary to manage future growth effectively, especially given the city's geographical constraints. Planning will need to focus on sustainable development to ensure the city can continue to grow without overwhelming its existing infrastructure.



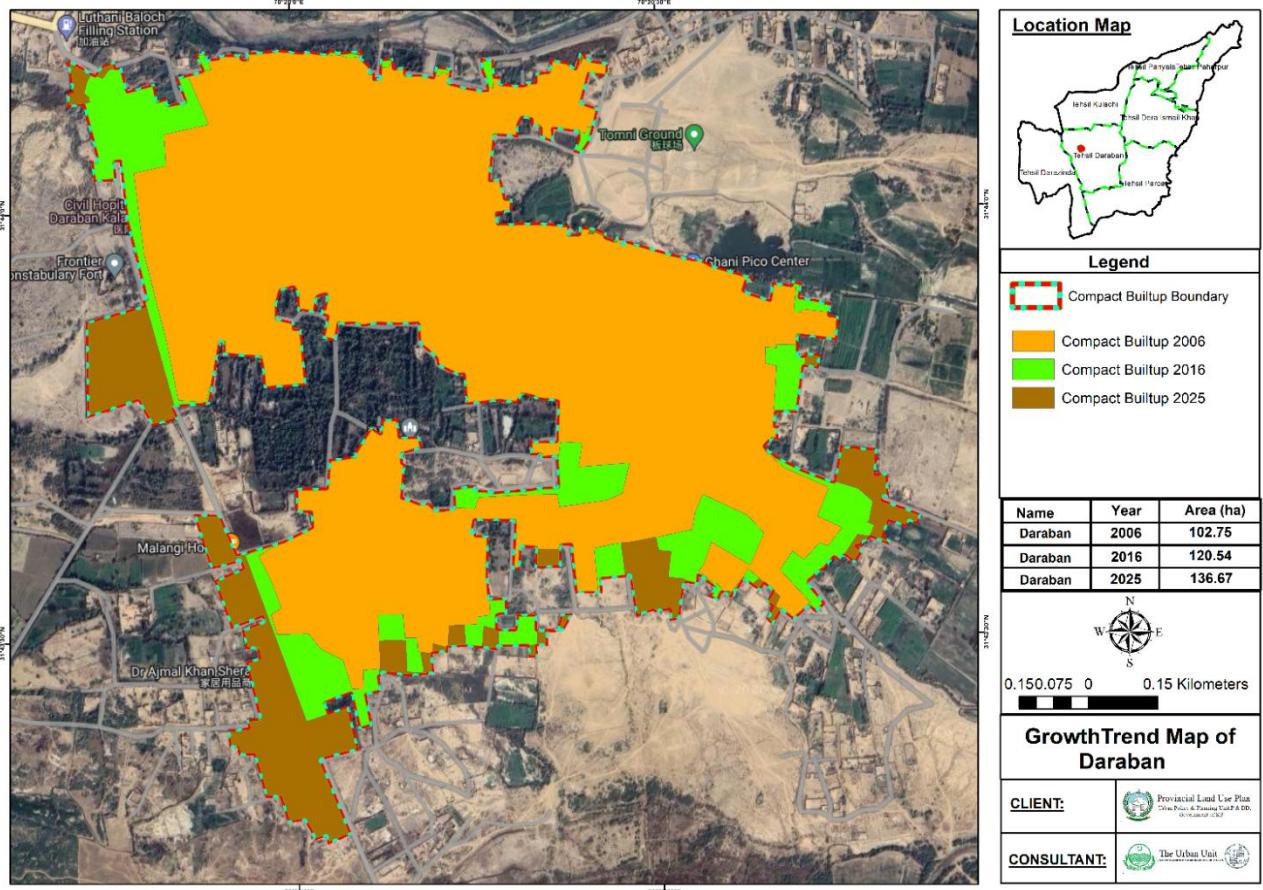
Map 1-16: Panyala TC growth trend through the years

1.6.5.2.6 Daraban TC

The urban growth trend of Daraban Urban is analyzed from 2006, 2016, and 2025. In 2006, the compact built-up area was 102.75 hectares which by 2016, expanded to 120.54 hectares marking a growth of 17% over 10 years. Further expansion occurred as by 2025, with the built-up area reaching 136.67 hectares, an increase of 14% since 2016 and a total growth of 34% since 2006.

The **Map** below illustrates that between 2006 and 2016, most of the growth took place in the southern and western parts of Daraban, driven by the expansion of infrastructure and roadways that opened new areas for development. The 2016-2025 period saw further urbanization, particularly in the western directions, where available land was transformed into residential and commercial zones. This continued expansion highlights the city’s steady urban sprawl in response to population growth and infrastructure improvements.

Looking forward, Daraban's future growth potential lies in the southern and eastern regions, where open land is still available for urbanization. Northern areas might also experience infill development as the city's infrastructure continues to evolve. Strategic planning will be critical to managing this growth and ensuring that the necessary infrastructure and services are in place to support the expanding urban footprint.



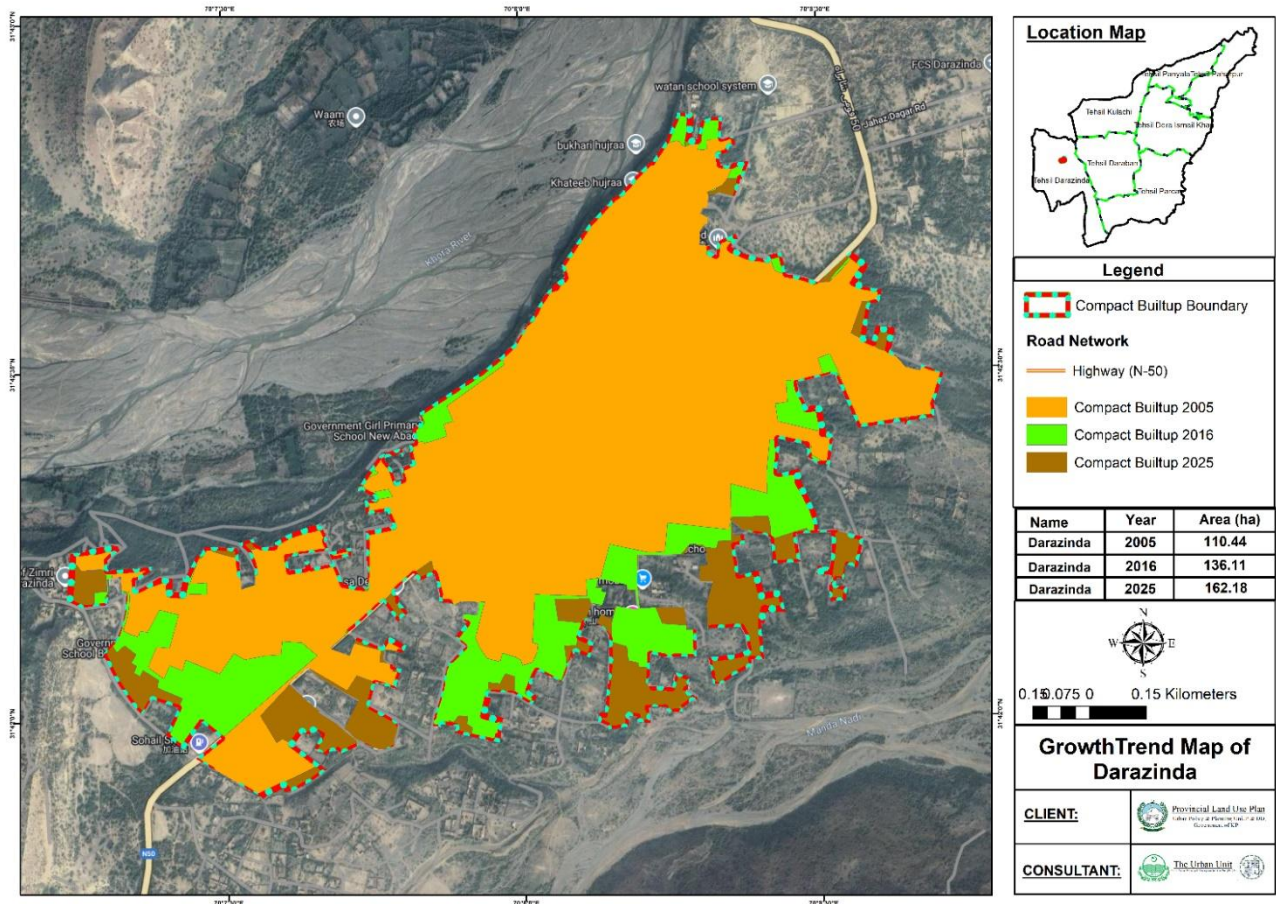
Map 1-17: Daraban TC growth trend through the years

1.6.5.2.7 Darazinda TC

The urban growth trend of Darazinda Urban has been analyzed using historical imagery from 2005, 2016, and 2025. In 2005, the compact built-up area was 111.4 hectares which increased to 136.11 hectares by 2016 recording growth of 22% over this period. Further expansion with the built-up area reaching 162.18 hectares, representing a growth of 16.8% since 2013, and a total growth of 42.8% since 2005.

Map below indicates that from 2005 to 2016, urban expansion occurred primarily in the southern parts of the city, with new development occurred by the expansion of road networks and major highway. Between 2016 and 2025, the city saw further growth in the same direction where larger sections of previously undeveloped land were converted into built up as indicated by the green zones on the Map.

Looking ahead, Darazinda's future growth potential seems strongest in the western and southern regions, where significant land remains available for urbanization. The eastern parts of the city might also experience infill development as infrastructure continues to improve. Strategic urban planning will be vital in managing this rapid growth and ensuring the necessary infrastructure and services are in place to support the expanding population.



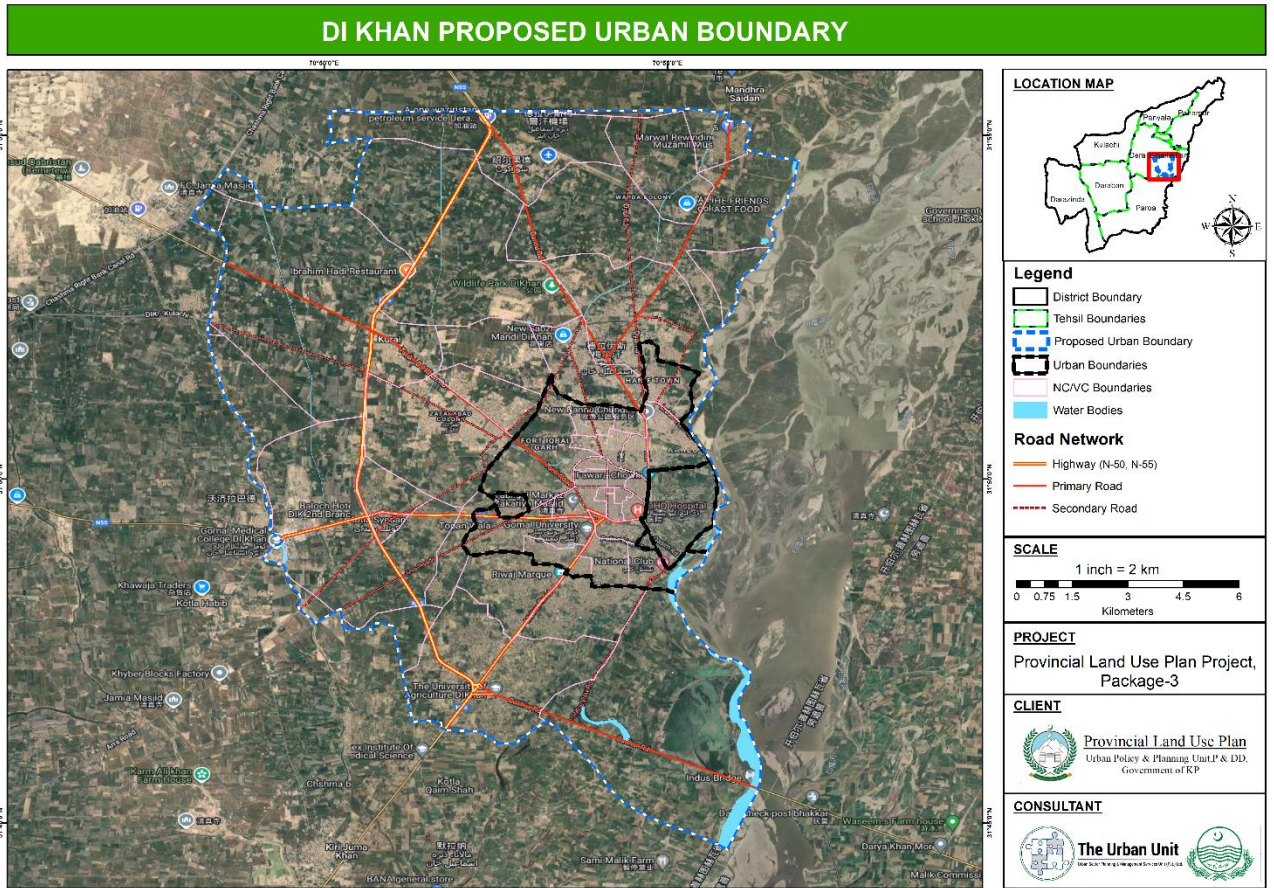
Map 1-18: Darazinda TC growth trend through the years

1.6.6 Proposed Planning Boundary of Urban Centers

As discussed above, the existing boundaries of all urban areas other than D.I. Khan MC and Panyala TC have sufficient land available for plan period requirement. The proposed boundary was drawn considering both natural and man-made physical features, maintaining a regular shape to avoid jurisdictional confusion. These boundaries aim to support sustainable growth, minimize environmental conflicts, and optimize land use for residential, commercial, and public service needs.

1.6.6.1 D.I. Khan City

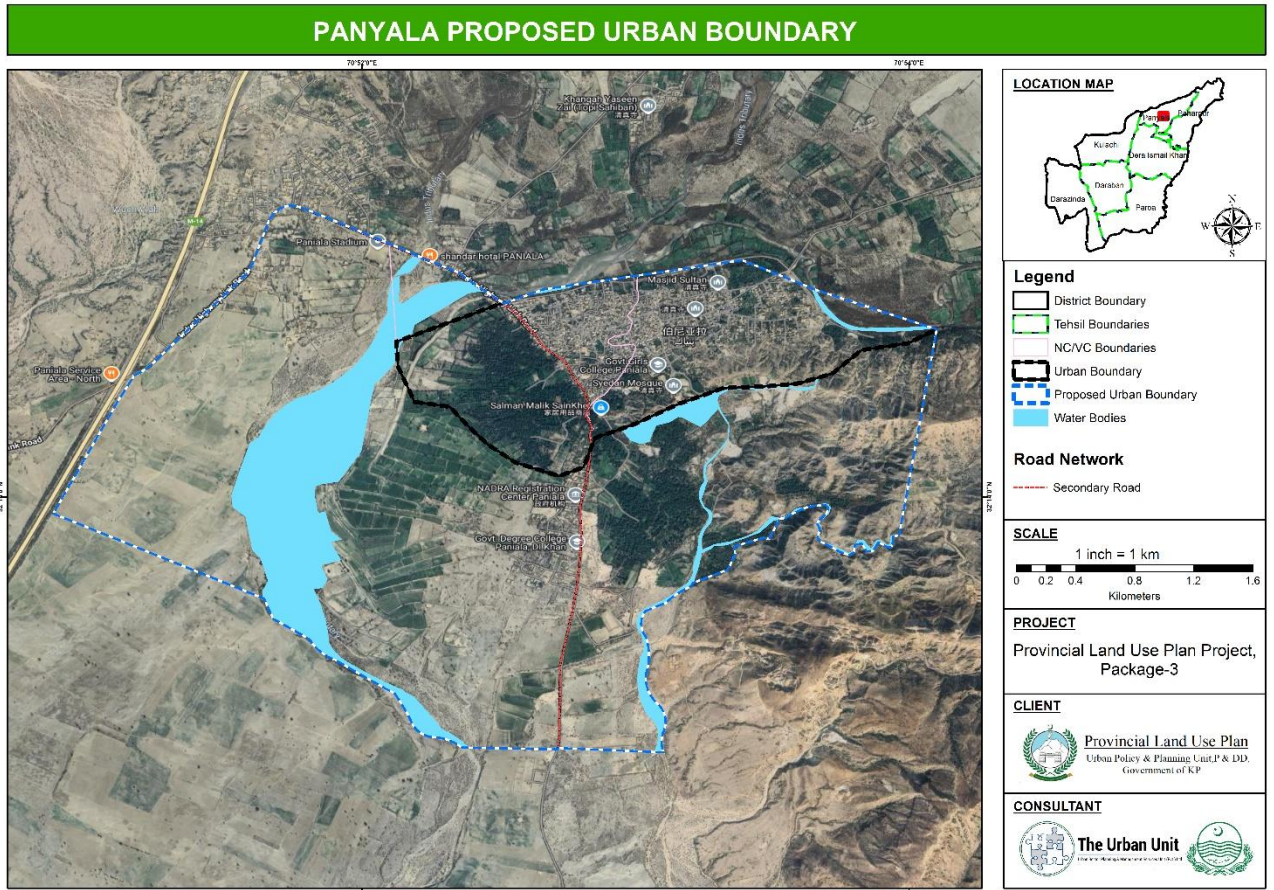
The delineation of the proposed urban boundary of D.I. Khan has been carried out with careful consideration of the area's demographic profile, natural features, and physical infrastructure. The boundary has been meticulously defined to ensure the optimal provision of services and facilities to the urban population, accounting for both current needs and future growth. The urban boundary is defined along the Eastern edge, following the natural course of the Indus River urbanizing the Kachi Paidn Khan settlement. From this point, the boundary turns Westward intersecting the D I Khan-Mianwali Road following the local road it follows the VC boundaries of Shorkot, Ratta Kulachi II and Korai after which it follows the waterbody in the Southern direction. From this point, the boundary follows the VC boundary of Nawab and Jhok Qureshi and continues Eastward following the Tehsil boundary till it reaches the Indus River. Below **Map** shows the proposed urban boundary of D I Khan city.



Map 1-19: D.I. Khan City Proposed Boundary

1.6.6.2 Panyala Urban Center

The delineation of the proposed urban boundary of Panyala urban center has been carried out with careful consideration of the area's demographic profile, natural features, and physical infrastructure. The boundary has been meticulously defined to ensure the optimal provision of services and facilities to the urban population, accounting for both current needs and future growth. The urban boundary is defined along the Northern edge by the existing Indus Highway link road moving towards the West and reaching the M-14 motorway. Following the M-14 to the South, the boundary then moves Eastwards reaching the water body whose course is followed until it intersects the secondary road and touches smaller water body. From this point onwards, the boundary moves upward in the North direction following the water course till it meets the existing urban boundary on the Indus Highway link road. Below **Map** shows the proposed urban boundary of Panyala urban center.



Map 1-20: Panyala Urban Center Proposed Boundary

1.6.7 Rural to Urban Population Transformation

To calculate the population within the proposed urban area, firstly, two sets of data were extracted from the Geographic Information System (GIS) landuse dataset which are following:

- Residential land use area of the relevant administrative units such as Neighborhood Council (NC) or Village Council (VC)
- Residential land use area within the proposed urban boundary

Subsequently, the residential land use area within the proposed urban boundary was divided by the overall residential land use area of the respective NC or VC to obtain the ratio. This ratio was then multiplied by the total population of that NC or VC, allowing to estimate the population residing within the proposed urban boundary for the base year i.e. 2017. The equation below shows the formula to obtain the current population residing within the urban boundary:

$$\text{Current Urban Population} = \frac{\text{Residential area within urban boundary} \times \text{Population of NC/VC}}{\text{Total Residential area of NC/VC}}$$

Table 1-13: Population of Transitioning areas to be urbanized

Settlement	Urbanization Status	Total NC/VC Residential Area (Hectare)	Residential Area within Proposed Urban Boundary (Hectare)	Population of NC/VC (2017)	Estimated Urban Population (2017)
Aara	Fully	84.15	158.71	9322	9322
Ejaz Abad	Fully	43.08	43.08	12861	12861
Himmat	Fully	112.001	112.001	17778	17778

Settlement	Urbanization Status	Total NC/VC Residential Area (Hectare)	Residential Area within Proposed Urban Boundary (Hectare)	Population of NC/VC (2017)	Estimated Urban Population (2017)
Jhok Qureshi	Fully	117.91	117.91	17234	17234
Korai	Fully	222.55	222.55	20749	20749
Kotla Saidan-1	Fully	139.98	139.98	8647	8647
Kotla Saidan-2	Fully	20.713	20.713	14244	14244
Kotla Saidan-3	Fully	25.174	25.174	10085	10085
Lachra	Fully	23.04	23.04	15462	15462
Muryali	Fully	42.39	42.39	16007	16007
Nawab	Fully	157.19	157.19	22290	22290
Ratta Kulachi-1	Fully	107.33	107.33	14486	14486
Ratta Kulachi-2	Fully	102.83	102.83	22828	22828
Shor Kot	Fully	92.04	92.04	12943	12943
Singhar	Fully	68.56	68.56	10392	10392
Zafar Abad-1	Fully	34.20	34.20	16144	16144
Zafar Abad-2	Fully	173.67	173.67	11797	11797
Kachi Paind Khan	Partially	311.97	627.42	16587	8247
Kokar	Partially	84.15	158.71	14485	7680
Panyala Janubi	Partially	8.25	220.51	10469	392

1.6.8 Population Projection

As per study requirement, population of District D.I. Khan has been projected for 20 years using the geometric growth model, which is a robust technique for population forecasting. The formula of the geometric growth as well as the population projected, are given as under:

$$P_n = P_0 \times (1 + r/100)^t$$

Where;

P_n = Population of desired year

P_0 = Population of base year

r = Population growth rate

t = Number of years

The estimated population of 2017 as calculated in **Table 1-13** above was then projected geometrically using the respective tehsil wise population growth rate for those areas which were previously rural whereas for existing urban area population growth rate between 1998-2017 census was used to obtain the population residing within the urban boundary in 2025. Based on the 2017 census growth rates, District D.I. Khan's overall population is projected to reach 4,164,800 by 2045. The urban population is expected to be 1,850,734, and the rural population 2,314,065. The details of five-year interval projected population of District D.I. Khan are given below in **Table** and graphically shown in **Figure**.

Table 1-14: Population Projection of District D.I. Khan

Administrative Area	2017	2025	2030	2035	2040	2045
District Urban	665908	887760	1064513	1278252	1537034	1850734
District Rural	1029780	1294514	1495070	1728069	1998944	2314065
District Overall	1695688	2182273	2559584	3006321	3535978	4164800

URBAN AREA

Administrative Area	2017	2025	2030	2035	2040	2045
D I Khan City	486653	662999	805323	979111	1191511	1451339
Daraban	26932	33564	38515	44196	50715	58196
Darazinda	8842	11209	13001	15079	17489	20285
Kulachi	23053	25704	27514	29451	31524	33744
Paharpur	69289	87501	101241	117138	135532	156813
Panyala	11258	14185	16391	18941	21888	25295
Paroa	39881	52597	62529	74337	88374	105062
RURAL AREA						
Tehsil D I Khan	221322	288300	340100	401208	473295	558335
Tehsil Daraban	97001	120888	138719	159181	182661	209604
Tehsil Darazinda	59714	75703	87803	101837	118114	136993
Tehsil Kulachi	78801	96086	108766	123119	139365	157756
Tehsil Paharpur	213851	252730	280543	311416	345686	383728
Tehsil Panyala	93254	110208	122336	135799	150743	167332
Tehsil Paroa	265837	350598	416803	495510	589079	700317

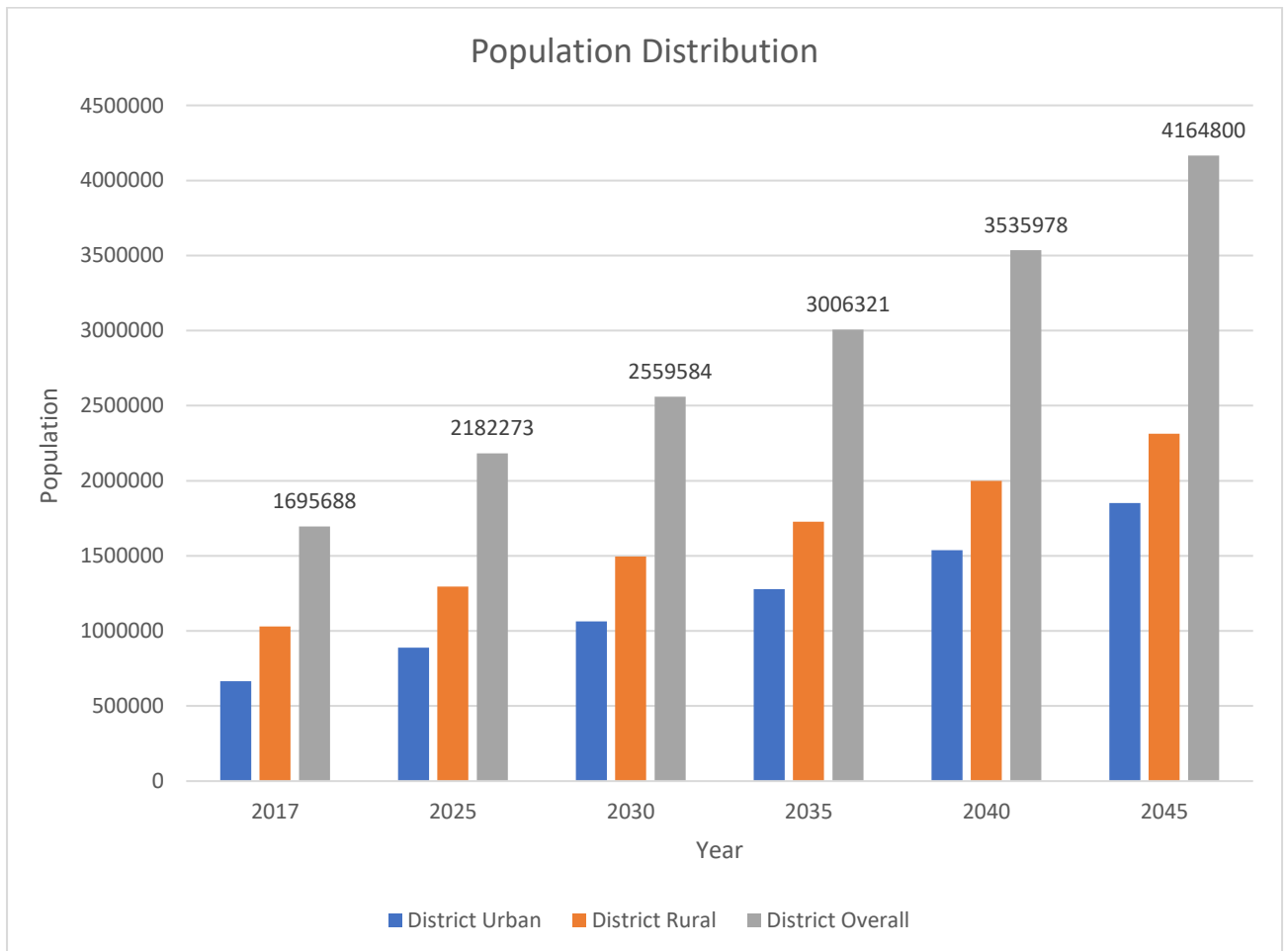


Figure 1-15: Population Projection for the plan period

1.7 Density of Planning Boundaries

Proposed urban boundaries have been delineated to ensure compact, high-density growth, optimize infrastructure, and control sprawl while protecting rural land. The identified proposed planning boundaries

encompass seven urban settlements within District D.I. Khan. The population, population density (persons per hectare, PPH), and net housing density (housing units per hectare) indicate compact, plan-led growth. D.I. Khan City remains the primary urban core, while the six urban centres experience proportional growth and step-ups in both PPH and net residential densities supporting efficient land use and staged housing supply through 2045.

Table 1-15: Density of Planning Boundaries

Urban Center	2025			2045		
	Population	Population Density (pph)	Net Current Housing Density (HU/Ha) *	Additional Population 2025-2045	Population Density (pph)	Net Proposed Housing Density (HU/Ha) *
DI Khan	654,816	170	21	776,292	200	50
Daraban	33,564	88	11	24,632	130	25
Kulachi	25,704	131	20	8,040	140	35
Paharpur	87,501	172	25	69,313	195	45
Panyala	14,185	51	8	11,110	96	25
Paroa	52,597	135	18	52,465	148	35
Darazinda	11,209	76	8	9,075	115	20

PPH = persons per hectare; HU/Ha = housing units per hectare

* Calculated using housing units 2025 divided by existing residential area

2. EXISTING LAND USE DISTRIBUTION

Land, a fundamental resource integral to human sustenance and progress, has witnessed centuries of exploitation and transformation. In the context of District D.I Khan, land emerges as a fundamental resource essential for the well-being and progress of its communities. Over centuries, humanity has honed its understanding of land resources, navigating the delicate balance between finite resources and ever-growing human needs. This equilibrium is notably strained, evident in the challenges faced by the district's land. The pressing demands on land manifest in various ways, from diminishing crop yields to the depletion of both the quality and quantity of available land.

2.1 Urban Centres

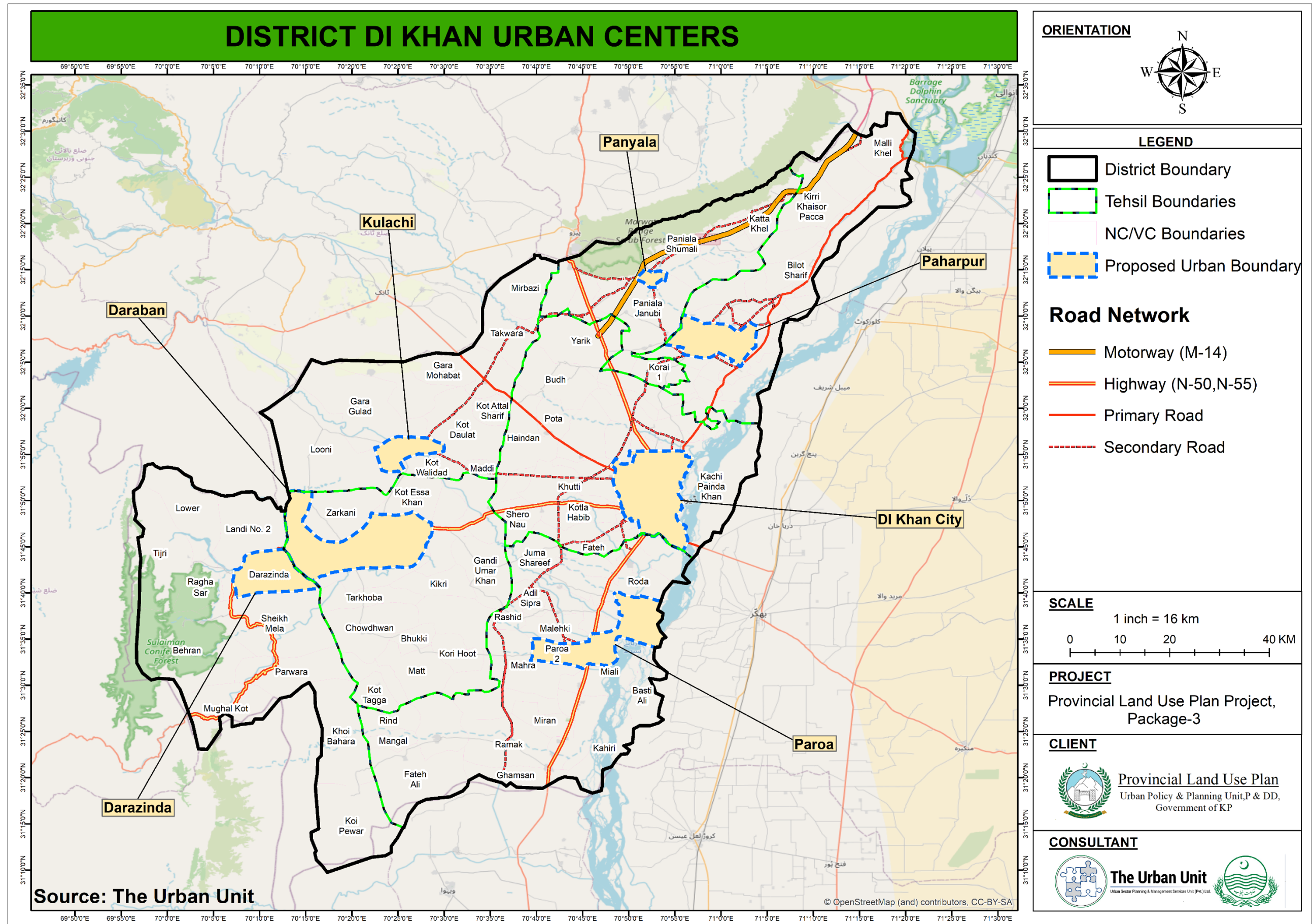
District D.I. Khan unfolds its unique urban land use distribution across various key areas. The urban fabric within the district is a dynamic amalgamation of residential, commercial, industrial, and recreational spaces, each contributing to the vibrancy and functionality of the urban environment. District D.I. Khan comprises of seven urban centers located in each of the seven tehsils. The D.I. Khan urban center, located within Tehsil D.I. Khan, serves as the district headquarters, acting as the administrative and economic hub of the region whereas the other six urban centers, each play a crucial role in the decentralization of urban services and fostering balanced regional development.

These urban centers are integral to the district's urban framework, playing a critical role in shaping its land-use patterns, fostering economic activity, and promoting balanced regional growth. The strategic development of these centers is expected to enhance the district's connectivity, service delivery, and overall urban functionality, thereby driving the sustainable urbanization and long-term prosperity of D.I. Khan. This strategic distribution of urban centers highlights the district's forward-looking approach to urbanization, aimed at addressing the growing demand for infrastructure, housing, and public services.

In line with modern town planning principles, these proposed urban centers are designed to address the evolving socio-economic needs of the district, providing a balanced distribution of services and infrastructure, while mitigating congestion in the existing municipal areas. Together, these centers will significantly contribute to the spatial planning objectives, enhancing the liveability and resilience of D.I. Khan's urban landscape. Below **Table** shows the details of the areas of the urban centers of District D.I. Khan and **Map** show their location.

Table 2-1: District D.I. Khan Urban Centers

Tehsil	Urban Center	Area (Sq. KM)	Percentage
DI Khan	D I Khan	180.61	22.8%
Paharpur	Paharpur	90.09	11.4%
Kulachi	Kulachi	47.93	6.1%
Paroa	Paroa	138.24	17.5%
Panyala	Panyala	11.23	1.4%
Darazinda	Darazinda	89.14	11.3%
Daraban	Daraban	233.96	29.6%
District D.I Khan Total Urban Area		791.21	100%



Map 2-1: District D.I. Khan Urban Centers

2.2 District Land Use Distribution

District D.I Khan, nestled in the heart of Khyber Pakhtunkhwa, is characterized by a diverse land use pattern that reflects the region's geographical and socio-economic dynamics. The land use classification unveils a comprehensive snapshot of the district's spatial organization, highlighting key patterns and concentrations across various categories.

The district spans **9055.25** square kilometers, showcasing a mix of residential, commercial, industrial, and public areas contributing to its lively and dynamic scenery. **39.45%** of the district's expanse harmoniously blends on Rangelands, while **34.92%** covers by agricultural land. In this vast canvas, residential and commercial zones play a modest yet crucial role, occupying **1.89%** and **0.07%** and fostering community growth and economic activities. Additionally, specific areas for public services, industrial activities, and designated military lands contribute uniquely to the overall land use picture.

Within this framework, the importance of transportation infrastructure **0.66%** becomes evident, linking different parts of the district. Moreover, various land uses, i.e. scattered industries and small industrial estate amounting to **0.16%** and **0.01%** add layers of complexity to District D.I Khan spatial dynamics. In essence, this broad-level analysis offers a glimpse of a district where the natural beauty of its landscape intertwines with purposeful land use, promoting sustainable development and resilience. The following analysis provides a comprehensive overview of the various land use categories, emphasizing key patterns and concentrations.

Residential and Commercial

The residential fabric covers an area of **170.94** square kilometers, constituting **1.89%** of the total district land. This includes various housing and living spaces catering to the population's diverse needs. With a minimal area of **0.22** square kilometers, mixed-use zones offer a blend of residential, commercial, and recreational spaces, contributing to a vibrant urban environment. The commercial landscape, spanning **6.61** square kilometers, forms **0.07%** of the district. It includes areas designated for business and trade activities.

Concentrated Public Sector

Covering **8.16 (0.09%)** square kilometers of education zones plays a crucial role in fostering intellectual growth and development within the district. Health facilities, occupying **0.57 (0.01%)** square kilometers, provide essential services to the community, ensuring the well-being of residents. Public Buildings and Government Offices encompassing **3.63 (0.04%)** square kilometers serve as hubs for civic engagement and public services, enhancing the overall quality of life. With an area of **0.48 (0.01%)** square kilometers, religious buildings contribute to the cultural and spiritual landscape of the district. The recreation, totaling **4.15 (0.05%)** square kilometers, offer recreational opportunities and contribute to the district's environmental sustainability.

Industrial

Several scattered industries and small industrial estate distributed across **14.66 (0.16%)** and **0.09 (0.01%)** square kilometers complement the industrial landscape, promoting economic diversity.

Physical Land Scope

Extending over a vast area of **3162.47 (34.92%)** square kilometers, agriculture remains a pivotal component of District D.I Khan landscape, contributing significantly to the local economy and sustenance. The expansive range of land covering **3572.62 (39.45%)** square kilometers defines a substantial portion of the district, characterized by natural vegetation and serving various ecological functions. Encompassing **210.02 (2.32%)** square kilometers, the forested areas contribute to biodiversity conservation, supporting a rich ecosystem within the district. The barren land, spanning **1307.65 (14.44%)** square kilometers, represents areas with limited vegetation, presenting both challenges and opportunities for sustainable land use planning. District D.I Khan is adorned with water bodies covering **410.87 (4.54%)** square kilometers, enhancing scenic beauty and providing essential resources. Orchards, occupying **32.80 (0.36%)** square kilometers, contribute to the district's agricultural diversity, providing fruits and economic opportunities.

Military Lands/Restricted Area

Covering **4.06 (0.04%)** square kilometers, military lands, and restricted areas are designated for strategic purposes, playing a crucial role in national security.

Other Land Uses

Graveyards, covering **5.82 (0.06%)** square kilometers, serve as solemn spaces for final resting, integrated into the district's cultural and social fabric. Spanning **42.20 (0.47%)** square kilometers, vacant areas represent potential spaces for future development, requiring careful consideration in land use planning.

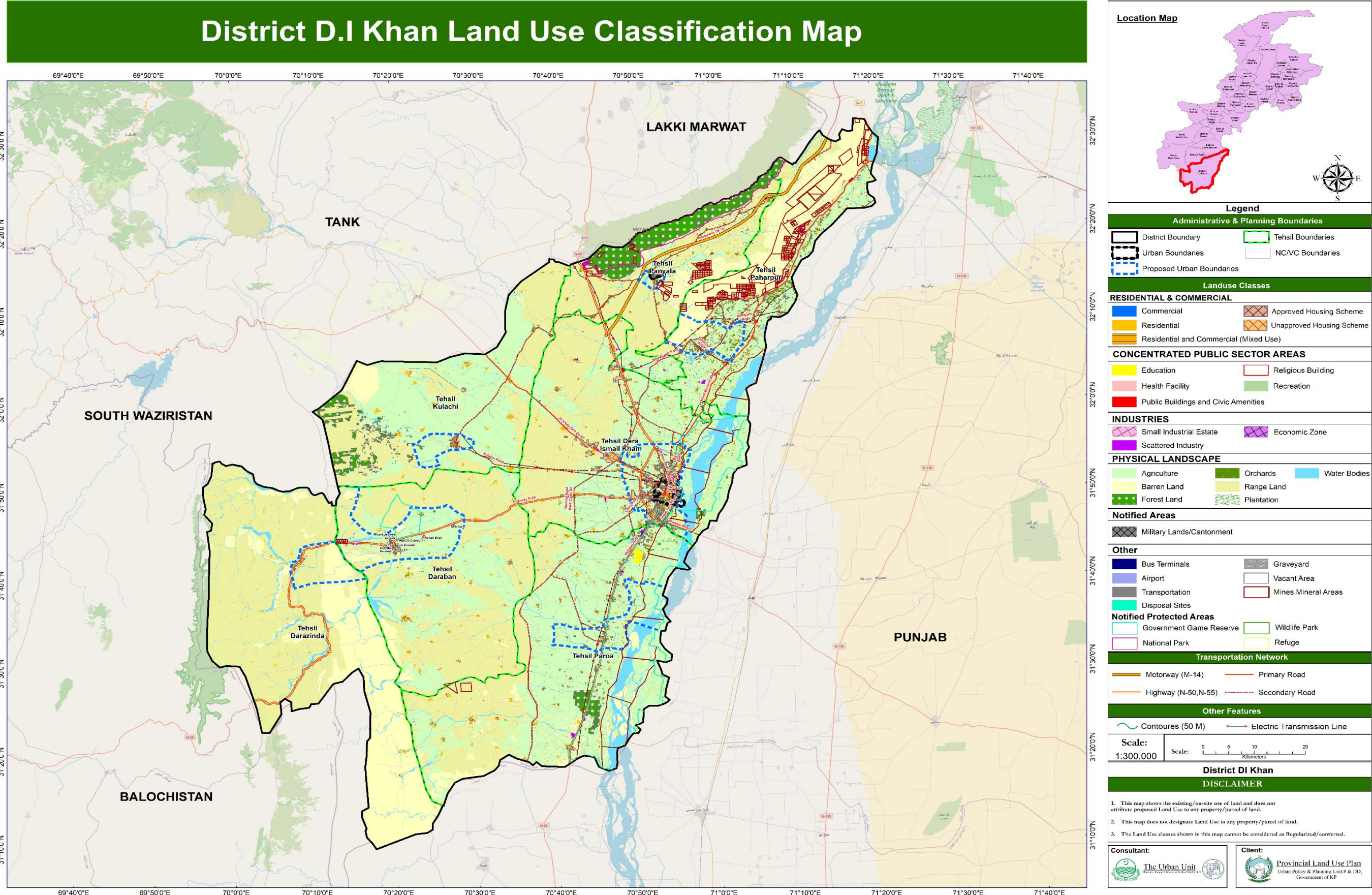
Transportation

The extensive road network, covering **59.44** square kilometers, facilitates connectivity and accessibility, playing a crucial role in the district's transportation infrastructure. Bus terminals, with a minimal area of **0.11** square kilometers, serve as hubs for public transportation, enhancing connectivity within the district. The Airport, spanning **0.79 (0.01%)** square kilometers, contributes to efficient transportation and logistics within District D.I. Khan.

The below **Table** shows detail of land use classification of district D.I. Khan.

Table 2-2: District D.I. Khan Land Use Classification

Landuse	Area (Sq. km)	Percentage
Agriculture	3162.47	34.92%
Airport	0.79	0.01%
Barren Land	1307.65	14.44%
Bus Terminals	0.11	0.001%
Commercial	6.61	0.07%
Disposal Site	0.02	0.0002%
Economic Zone	0.60	0.01%
Education	8.16	0.09%
Forest Land	210.02	2.32%
Graveyard	5.82	0.06%
Health Facility	0.57	0.01%
Military Lands/Cantonment	4.06	0.04%
Orchards	32.80	0.36%
Plantation	36.25	0.40%
Public Buildings and Civic Amenities	3.63	0.04%
Range Land	3572.62	39.45%
Recreation	4.15	0.05%
Religious Building	0.48	0.01%
Residential	170.94	1.89%
Residential and Commercial (Mixed Use)	0.22	0.002%
Scattered Industry	14.67	0.16%
Small Industrial Estate	0.09	0.001%
Transportation	59.44	0.66%
Vacant Area	42.20	0.47%
Water Bodies	410.87	4.54%
Grand Total	9055.25	100%



Map 2-2: Existing Landuse Classification of District D.I. Khan

2.3 Tehsil Land Use Distribution

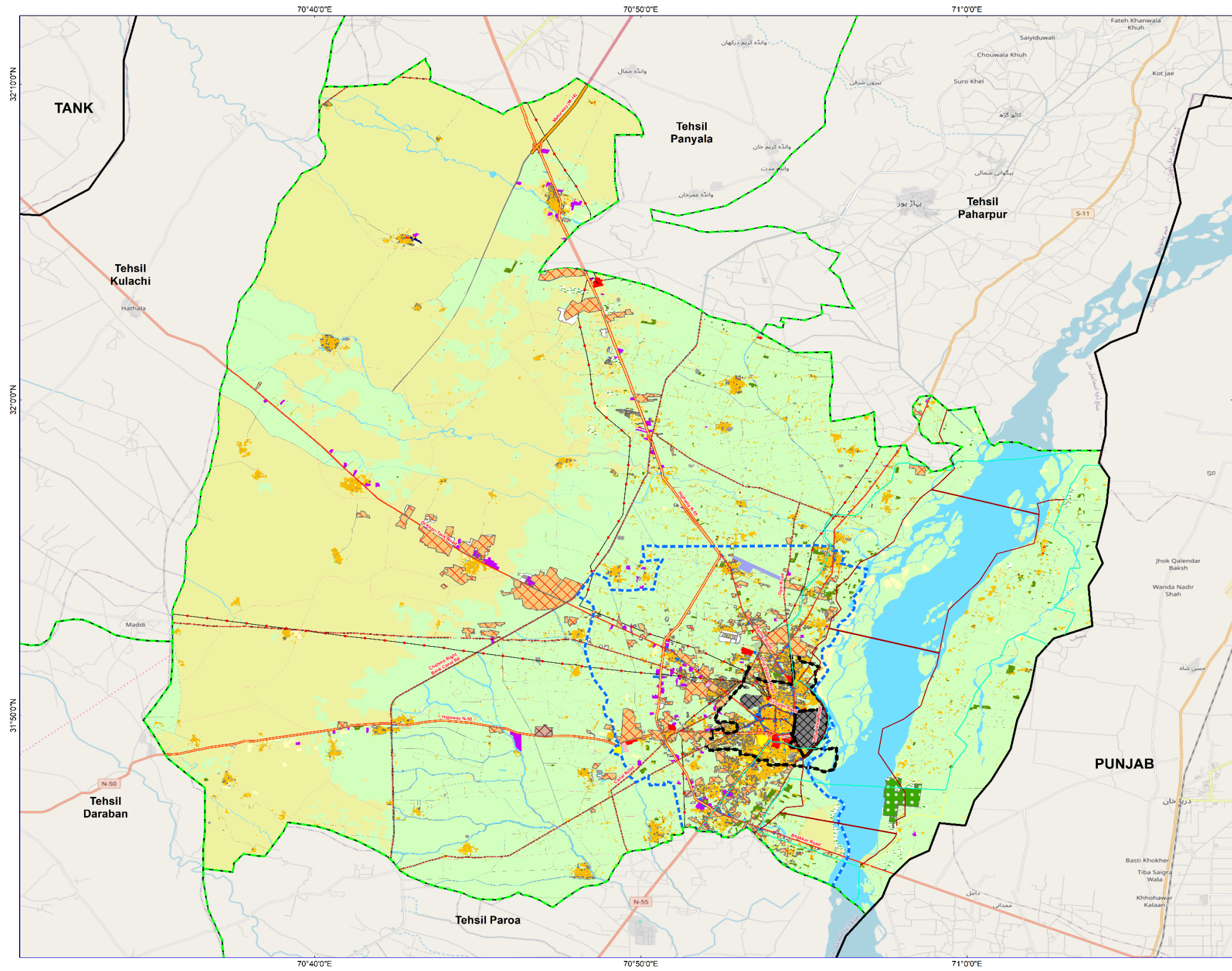
2.3.1 Tehsil D.I. Khan

Tehsil D.I Khan encompasses a total area of **1451.46** square kilometers, with a significant portion of the land **695.05** Sq. Km (**47.89%**) classified as an Agriculture land. The largest individual land use category within this tehsil is Agriculture Land; Range occupies **524.97** square kilometers or **36.17%** of the total area. Residential land also holds a **3.65%**, covering **53** square kilometers. Commercial areas occupy **4.09** square kilometers, constituting **0.28%** of the total area, while the Industrial sector is minimal at **4.65** square kilometers or **0.32%** occupied by scattered industry with a small industrial estate accounting for **0.09** sq. km area. The **Table** below shows detail of land use classification of Tehsil D.I Khan.

Table 2-3: Tehsil D.I. Khan Land Use Classification

Landuse	Area (Sq. km)	Percentage
Agriculture	695.05	47.89%
Airport	0.79	0.05%
Barren Land	9.26	0.64%
Bus Terminals	0.11	0.01%
Commercial	4.09	0.28%
Disposal Site	0.02	0.00%
Education	1.59	0.11%
Forest Land	2.69	0.19%
Graveyard	1.35	0.09%
Health Facility	0.34	0.02%
Military Lands/Cantonment	3.97	0.27%
Orchards	5.23	0.36%
Plantation	3.87	0.27%
Public Buildings and Civic Amenities	3.17	0.22%
Range Land	524.97	36.17%
Recreation	1.17	0.08%
Religious Building	0.18	0.01%
Residential	53.00	3.65%
Residential and Commercial (Mixed Use)	0.13	0.01%
Scattered Industry	4.65	0.32%
Small Industrial Estate	0.09	0.01%
Transportation	18.00	1.24%
Vacant Area	21.97	1.51%
Water Bodies	95.77	6.60%
Grand Total	1451.46	100%

Tehsil D.I Khan Land Use Classification Map



Location Map

Legend

Administrative & Planning Boundaries	
<ul style="list-style-type: none"> District Boundary Urban Boundaries Proposed Urban Boundaries 	<ul style="list-style-type: none"> Tehsil Boundaries NC/VC Boundaries
Landuse Classes	
RESIDENTIAL & COMMERCIAL	
<ul style="list-style-type: none"> Residential Residential and Commercial (Mixed Use) 	<ul style="list-style-type: none"> Approved Housing Scheme Unapproved Housing Scheme
CONCENTRATED PUBLIC SECTOR AREAS	
<ul style="list-style-type: none"> Education Health Facility Public Buildings and Civic Amenities 	<ul style="list-style-type: none"> Religious Building Recreation
INDUSTRIES	
<ul style="list-style-type: none"> Small Industrial Estate 	<ul style="list-style-type: none"> Scattered Industry
PHYSICAL LANDSCAPE	
<ul style="list-style-type: none"> Agriculture Barren Land Forest Land 	<ul style="list-style-type: none"> Orchards Range Land Plantation
<ul style="list-style-type: none"> Water Bodies 	
Notified Areas	
<ul style="list-style-type: none"> Military Lands/Cantonment 	
Other	
<ul style="list-style-type: none"> Bus Terminals Airport Transportation Disposal Sites 	<ul style="list-style-type: none"> Graveyard Vacant Area Mines Mineral Areas
Notified Protected Areas	
<ul style="list-style-type: none"> Government Game Reserve National Park Refuge 	
Transportation Network	
<ul style="list-style-type: none"> Motorway (M-14) Highway (N-50, N-55) Primary Road Secondary Road 	
Other Features	
<ul style="list-style-type: none"> Contours (50 M) Electric Transmission Line 	
<p>Scale: 1:100,000</p> <p>Scale: 0 2.5 5 10 Kilometers</p>	
District DI Khan	
DISCLAIMER	
<ol style="list-style-type: none"> 1. This map shows the existing/on-site use of land and does not attribute proposed Land Use to any property/parcel of land. 2. This map does not designate Land Use to any property/parcel of land. 3. The Land Use classes shown in this map cannot be considered as Regularized/converted. 	
<p>Consultant:</p>	<p>Client:</p> <p>Urban Policy & Planning Unit, P & DD, Government of KP</p>

Map 2-3: Existing Landuse Classification of Tehsil D.I. Khan

2.3.2 Tehsil Paharpur

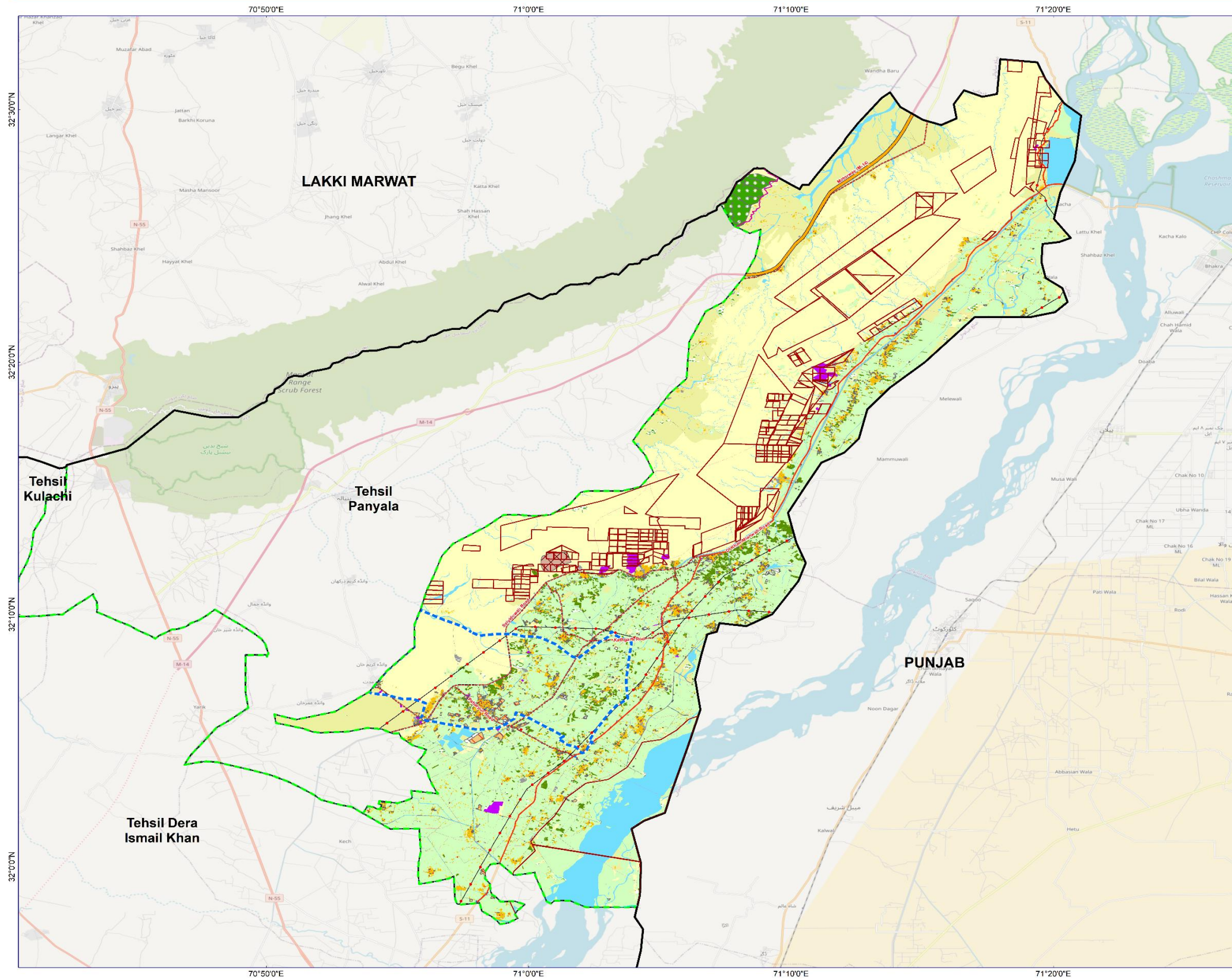
Tehsil Paharpur covers a total area of **966.62** square kilometers. This tehsil's primary land use is Barren Land covering **387.03** square kilometers or **(40.04%)** area of the tehsil. Agriculture land spans on **328.76** square kilometers or **(34.01%)**. Residential land covers **30.45** square kilometers, representing **3.15%** of the tehsil's area. Commercial covers **0.59** Square kilometers or **0.06 %**. Residential and Commercial (Mixed Used) areas are relatively small, making up only **0.07** square kilometers or **0.01%**, and the Industrial sector Spans **3.51** square kilometers or **0.36%**.

The **Table** below shows detail of landuse classification of Tehsil Paharpur.

Table 2-4: Tehsil Paharpur Land Use Classification

Landuse	Area (sq. km)	Percentage
Agriculture	328.76	34.01%
Barren Land	387.03	40.04%
Commercial	0.59	0.06%
Education	0.58	0.06%
Forest Land	5.85	0.61%
Graveyard	1.72	0.18%
Health Facility	0.06	0.01%
Orchards	18.64	1.93%
Plantation	4.71	0.49%
Public Buildings and Civic Amenities	0.08	0.01%
Range Land	106.97	11.07%
Recreation	0.83	0.09%
Religious Building	0.14	0.01%
Residential	30.45	3.15%
Residential and Commercial (Mixed Use)	0.07	0.01%
Scattered Industry	3.51	0.36%
Transportation	9.18	0.95%
Vacant Area	6.85	0.71%
Water Bodies	60.63	6.27%
Grand Total	966.62	100%

Tehsil Paharpur Land Use Classification Map



Location Map

Legend

Administrative & Planning Boundaries

- District Boundary
- Proposed Urban Boundaries
- Tehsil Boundaries
- NC/VC Boundaries

Landuse Classes

RESIDENTIAL & COMMERCIAL

- Commercial
- Residential
- Residential and Commercial (Mixed Use)
- Approved Housing Scheme
- Unapproved Housing Scheme

CONCENTRATED PUBLIC SECTOR AREAS

- Education
- Health Facility
- Public Buildings and Civic Amenities
- Religious Building
- Recreation

INDUSTRIES

- Scattered Industry

PHYSICAL LANDSCAPE

- Agriculture
- Barren Land
- Forest Land
- Orchards
- Range Land
- Plantation
- Water Bodies

Notified Areas

- Graveyard
- Transportation
- Government Game Reserve
- National Park
- Vacant Area
- Mines Mineral Areas

Notified Protected Areas

- Government Game Reserve
- National Park

Transportation Network

- Motorway (M-14)
- Primary Road
- Secondary Road

Other Features

- Contoures (50 M)
- Electric Transmission Line

Scale:
1:100,000

District DI Khan

DISCLAIMER

1. This map shows the existing/on-site use of land and does not attribute proposed Land Use to any property/parcel of land.
2. This map does not designate Land Use to any property/parcel of land.
3. The Land Use classes shown in this map cannot be considered as Regularized/converted.

Consultant: The Urban Unit

Client: Provincial Land Use Plan
Urban Policy & Planning Unit P & DD,
Government of KP

Map 2-4: Existing Landuse Classification of Tehsil Paharpur

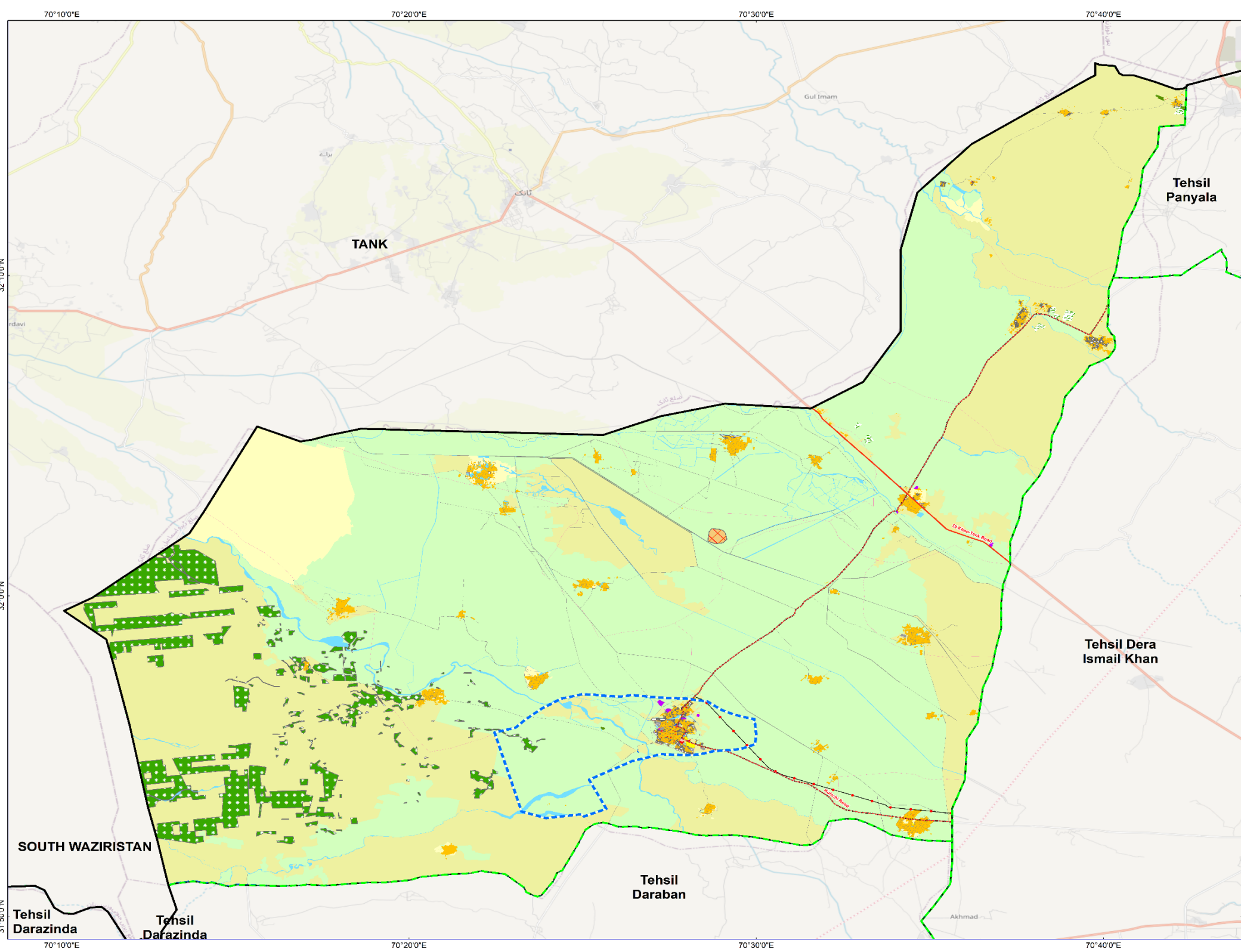
2.3.3 Tehsil Kulachi

Tehsil Kulachi has a total area of **1,138.01** square kilometers. Most of the land in this tehsil is cover by Agriculture Land and Range, covering **600.19 (52.74%)** and **414.66 (37.03%)** square kilometers. Residential land constitutes **1.24%** of the total area accounting for **14.15** square kilometers. Commercial areas occupy **0.05** square kilometers, which is **0.004%** of the total area that is almost negligible, while the Industrial sector spans at **0.23** square kilometers or **0.02%**. The detail Land use of Tehsil Kulachi is shown in below **Table**.

Table 2-5: Tehsil Kulachi Land use classification

Landuse	Area (sq. km)	Percentage
Agriculture	600.19	52.74%
Barren Land	45.84	4.03%
Commercial	0.05	0.004%
Education	0.19	0.02%
Forest Land	40.97	3.60%
Graveyard	0.26	0.02%
Health Facility	0.03	0.002%
Orchards	0.13	0.01%
Plantation	0.87	0.08%
Public Buildings and Civic Amenities	0.03	0.00%
Range Land	414.66	36.44%
Recreation	0.51	0.04%
Religious Building	0.02	0.00%
Residential	14.15	1.24%
Scattered Industry	0.23	0.02%
Transportation	5.97	0.52%
Vacant Area	1.32	0.12%
Water Bodies	12.58	1.11%
Grand Total	1138.01	100%

Tehsil Kulachi Land Use Classification Map



Location Map

Legend

Administrative & Planning Boundaries

- District Boundary
- Tehsil Boundaries
- Proposed Urban Boundaries
- NC/CVC Boundaries

Landuse Classes

RESIDENTIAL & COMMERCIAL

- Commercial
- Residential
- Approved Housing Scheme
- Unapproved Housing Scheme

CONCENTRATED PUBLIC SECTOR AREAS

- Education
- Health Facility
- Public Buildings and Civic Amenities
- Religious Building
- Recreation

INDUSTRIES

- Scattered Industry

PHYSICAL LANDSCAPE

- Agriculture
- Barren Land
- Forest Land
- Orchards
- Range Land
- Plantation
- Water Bodies

Notified Areas

Other

- Graveyard
- Transportation
- Vacant Area

Transportation Network

- Primary Road
- Secondary Road

Other Features

- Contours (50 M)
- Electric Transmission Line

Scale: 1:100,000

District DI Khan

DISCLAIMER

- This map shows the existing/on-site use of land and does not attribute proposed Land Use to any property/parcel of land.
- This map does not designate Land Use to any property/parcel of land.
- The Land Use classes shown in this map cannot be considered as Regularized/converted.

Consultant: The Urban Unit

Client: Provincial Land Use Plan, Urban Policy & Planning Unit, P & DD, Government of KP

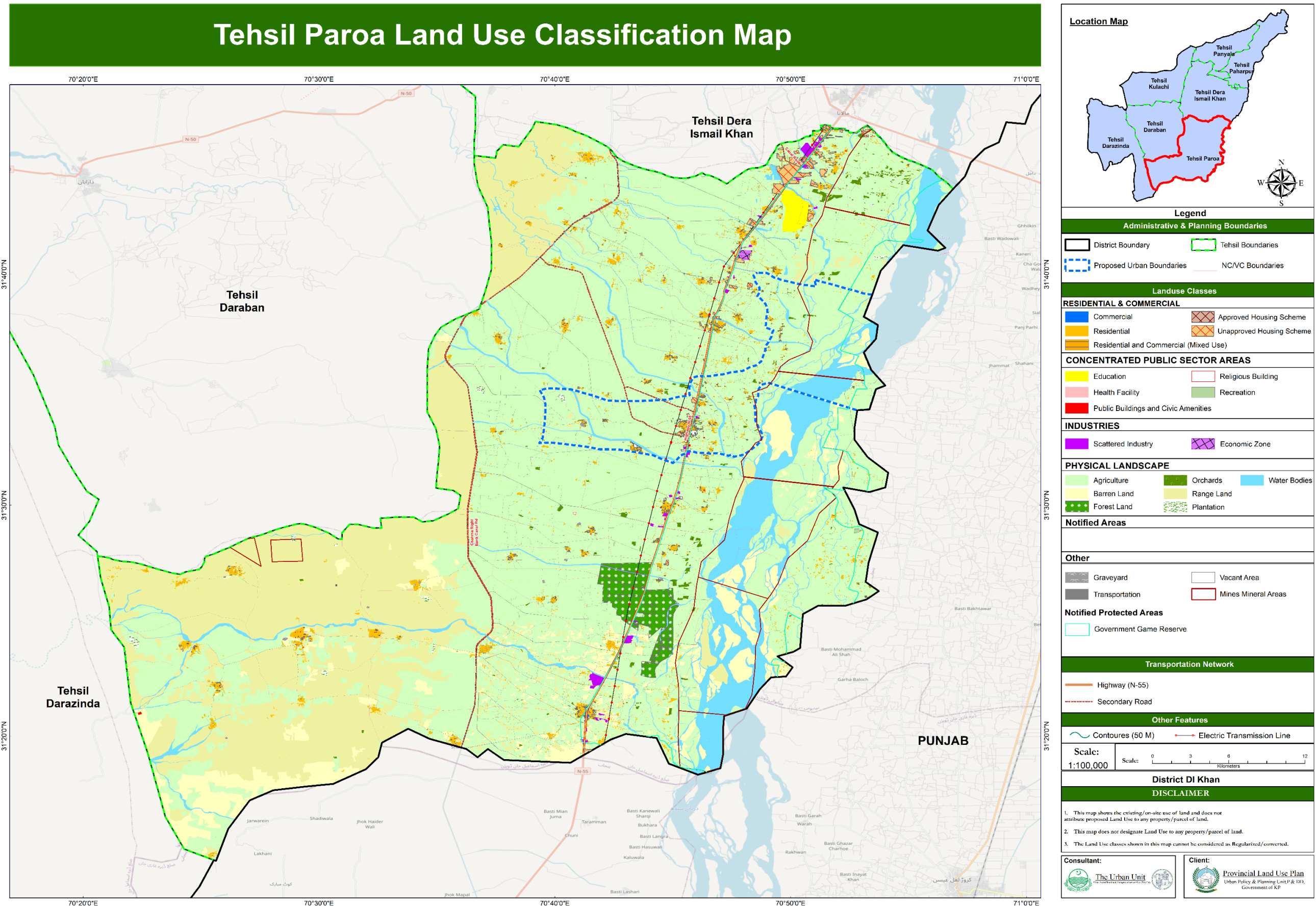
Map 2-5: Existing Landuse Classification of Tehsil Kulachi

2.3.4 Tehsil Paroa

Tehsil Paroa total area is **1733.1** square kilometers. In this tehsil, same as Kulachi tehsil Agriculture land occupy most of the land covering **1023.79** square kilometers or **59.07%**. Rangeland occupy **389.34** square kilometers or **22.47%** of the area. While residential area covers **35.79** square kilometers or **2.06%**. Commercial area constitutes of **0.93** square kilometers or **0.05%**. Transport sector is almost negligible occupy **15.46** square kilometers or **0.89%**. In this tehsil, there is currently an absence of mixed-use development, which limits the potential for creating integrated spaces that combine residential, commercial, and recreational areas. The detail Landuse classification of tehsil Paroa is stipulated in **Table**.

Table 2-6: Tehsil Paroa Land Use Classification

Landuse	Area (Sq. km)	Percentage
Agriculture	1023.79	59.07%
Barren Land	100.90	5.82%
Commercial	0.93	0.05%
Economic Zone	0.60	0.03%
Education	5.16	0.30%
Forest Land	22.24	1.28%
Graveyard	0.85	0.05%
Health Facility	0.06	0.003%
Orchards	5.81	0.34%
Plantation	2.29	0.13%
Public Buildings and Civic Amenities	0.12	0.01%
Range Land	389.34	22.47%
Recreation	0.27	0.02%
Religious Building	0.09	0.005%
Residential	35.79	2.06%
Residential and Commercial (Mixed Use)	0.02	0.001%
Scattered Industry	3.26	0.19%
Transportation	15.46	0.89%
Vacant Area	6.22	0.36%
Water Bodies	119.90	6.92%
Grand Total	1733.10	100%



Map 2-6: Existing Landuse Classification of Tehsil Paroa

2.3.5 Tehsil Panyala

Tehsil Panyala total area is **745.11** square kilometers. Most of the land is cover by Rang land in this tehsil occupying **386.83** square kilometers or **51.92%**. Agriculture and forestlands cover **66.58** and **138.27** square kilometers or **8.92%** and **18.56%**. Education, Commercial and Residential area occupy **0.22**, **0.50** and **11.26** square kilometers or **0.03%**, **0.07%** and **1.51%** respectively. The detail land use classification of tehsil Panyala shown below in **Table**.

Table 2-7: Tehsil Panyala Land Use Classification

Landuse	Area (sq. km)	Percentage
Agriculture	66.58	8.94%
Barren Land	88.95	11.94%
Bus Terminals	0.001	0.0002%
Commercial	0.50	0.07%
Education	0.22	0.03%
Forest Land	138.27	18.56%
Graveyard	0.66	0.09%
Health Facility	0.02	0.003%
Orchards	1.92	0.26%
Plantation	20.88	2.80%
Public Buildings and Civic Amenities	0.11	0.01%
Range Land	386.83	51.92%
Recreation	1.21	0.16%
Religious Building	0.04	0.01%
Residential	11.26	1.51%
Scattered Industry	2.03	0.27%
Transportation	3.91	0.52%
Vacant Area	2.61	0.35%
Water Bodies	19.10	2.56%
Grand Total	745.11	100%

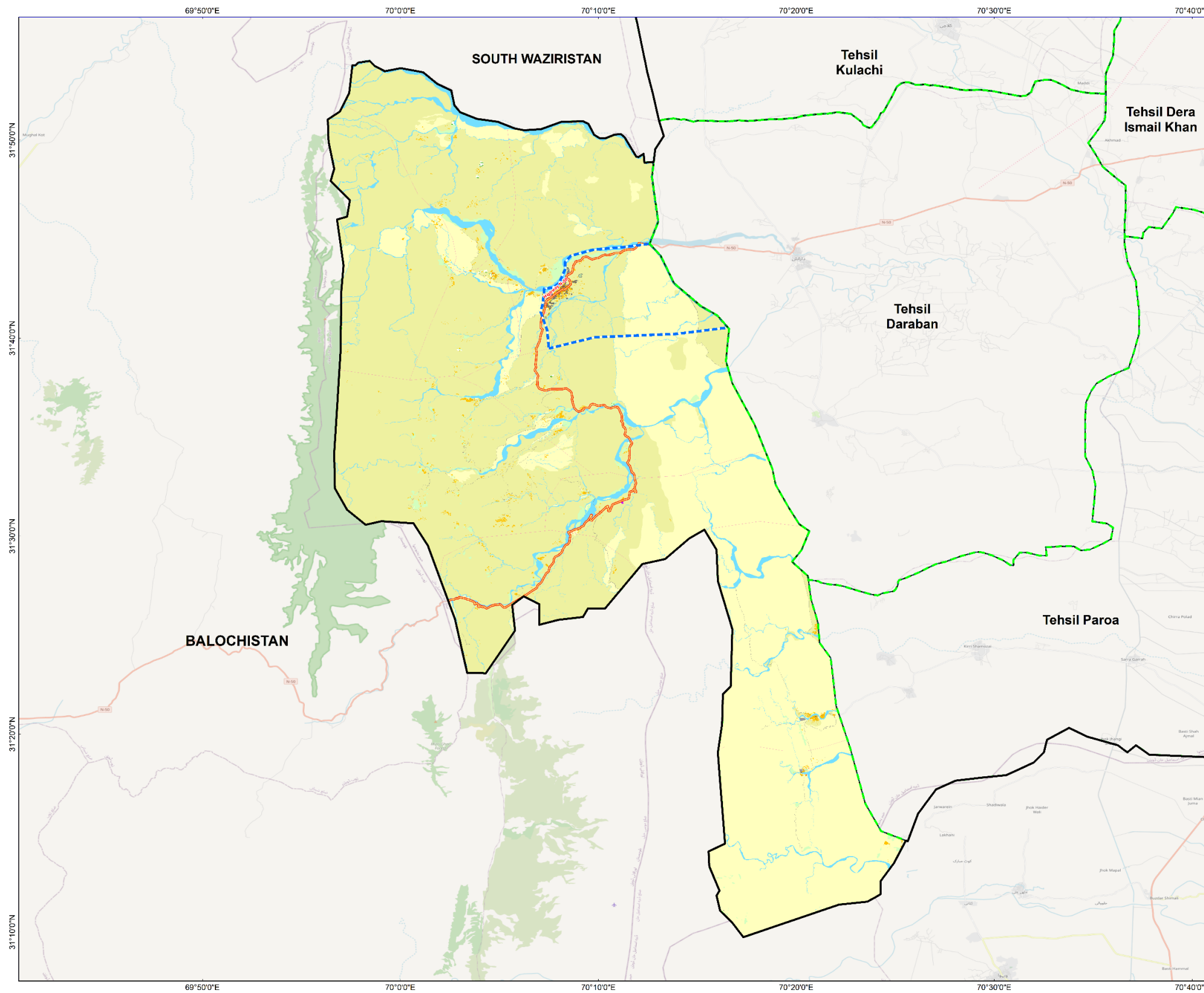
2.3.6 Tehsil Darazinda

Tehsil Darazinda total area is **1662.48** square kilometers. In Tehsil Darazinda significant land have been occupied by Range Land covering **948.31** square kilometers or **57%** area. Second largest area covers by Barren land occupying **614.16** square kilometers or **36.9%** of the area. While Commercial, Education and Residential is almost negligible occupying **0.21**, **0.22** and **8.75** square kilometers, additionally, the industrial and transportation sectors have very limited allocated land, restricting their potential for growth and development. The detail landuse Classification of tehsil Darazinda have been shown in **Table** below.

Table 2-8: Tehsil Darazinda Landuse Classification

Landuse	Area (sq. km)	Percentage
Agriculture	16.97	1.02%
Barren Land	614.16	36.94%
Commercial	0.21	0.01%
Education	0.22	0.01%
Graveyard	0.30	0.02%
Health Facility	0.04	0.002%
Military Lands/Cantonment	0.08	0.005%
Plantation	0.68	0.04%
Public Buildings and Civic Amenities	0.01	0.00%
Range Land	948.31	57.04%
Recreation	0.09	0.01%
Religious Building	0.01	0.0005%
Residential	8.75	0.53%
Scattered Industry	0.05	0.003%
Transportation	2.70	0.16%
Vacant Area	0.39	0.02%
Water Bodies	69.52	4.18%
Grand Total	1662.48	100%

Tehsil Darazinda Land Use Classification Map



Location Map

Legend

Administrative & Planning Boundaries

- District Boundary
- Tehsil Boundaries
- Proposed Urban Boundaries
- NC/C Boundaries

Landuse Classes

RESIDENTIAL & COMMERCIAL

- Commercial
- Residential

CONCENTRATED PUBLIC SECTOR AREAS

- Education
- Health Facility
- Public Buildings and Civic Amenities
- Religious Building
- Recreation

INDUSTRIES

- Scattered Industry

PHYSICAL LANDSCAPE

- Agriculture
- Barren Land
- Plantation
- Range Land
- Water Bodies

Notified Areas

- Military Lands/Cantonment

Other

- Graveyard
- Transportation
- Vacant Area

Transportation Network

- Highway (N-50)

Other Features

- Contours (50 M)
- Electric Transmission Line

Scale:
1:200,000

Scale: 0 4.25 8.5 17 Kilometers

District DI Khan

DISCLAIMER

1. This map shows the existing/on-site use of land and does not attribute proposed Land Use to any property/parcel of land.
2. This map does not designate Land Use to any property/parcel of land.
3. The Land Use classes shown in this map cannot be considered as Regularized/converted.

Consultant:

Client:

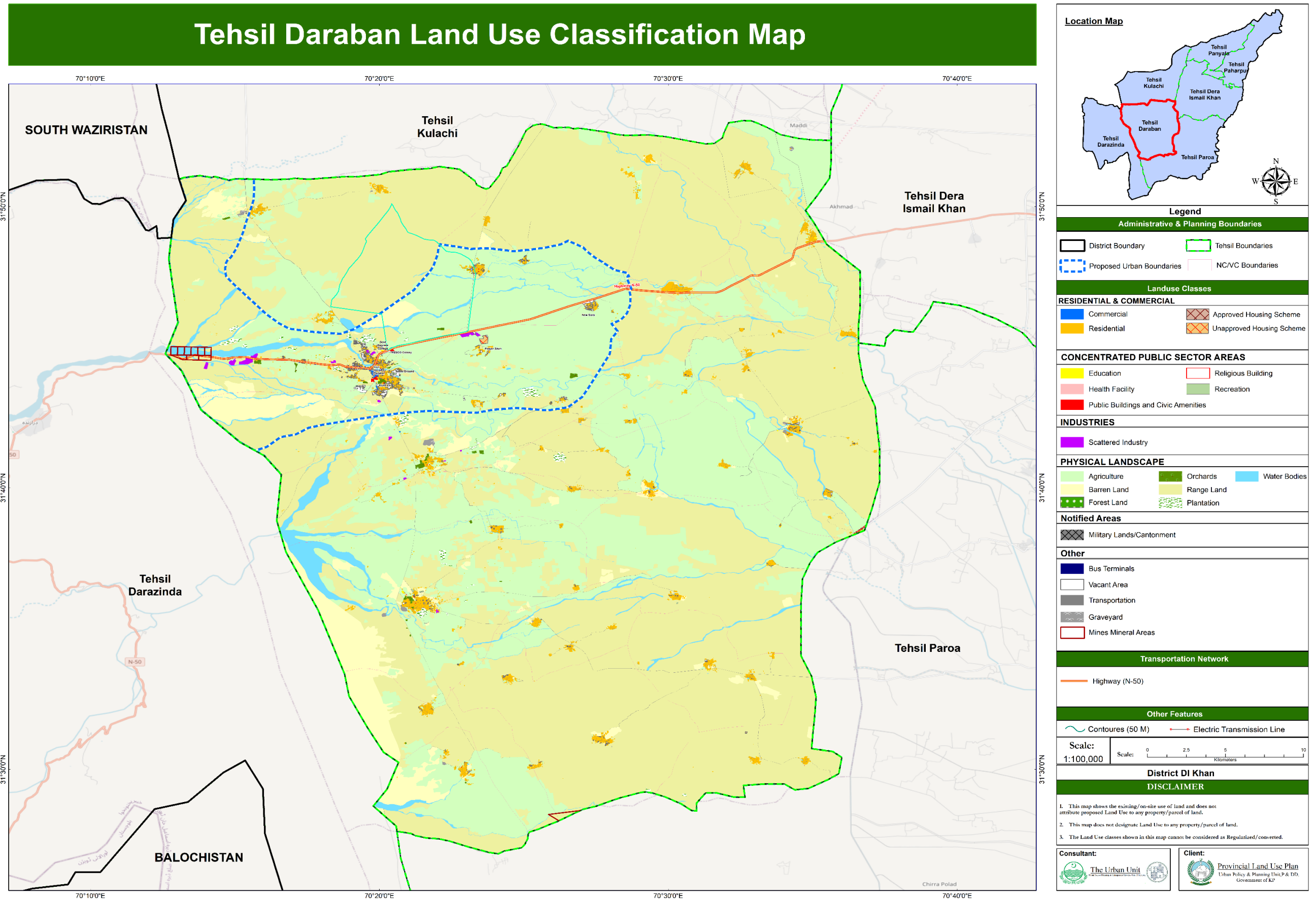
Map 2-8: Existing Landuse Classification of Tehsil Darazinda

2.3.7 Tehsil Daraban

Tehsil Daraban total area is **1358.47** square kilometers. In this tehsil most of the land is covered by Rangeland occupying **801.53** square kilometers or **59%**. Agriculture land cover **431.13** square kilometers or **31.74%**. Commercial, Education and Residential occupy **0.24**, **0.21** and **17.55** square kilometers. Or **0.02%**, **0.02%** and **1.29%**. In this tehsil same as Darazinda tehsil, the Transport and Industry sectors are almost negligible. Moreover, there are no mixed used development. The below **Table** shows land use classification of tehsil Daraban.

Table 2-9: Tehsil Daraban Land Use Classification

Landuse	Area (Sq. km)	Percentage
Agriculture	431.13	31.74%
Barren Land	61.51	4.53%
Bus Terminals	0.00	0.000%
Commercial	0.24	0.02%
Education	0.21	0.02%
Graveyard	0.68	0.05%
Health Facility	0.02	0.001%
Military Lands/Cantonment	0.01	0.001%
Orchards	1.06	0.08%
Plantation	2.96	0.22%
Public Buildings and Civic Amenities	0.12	0.01%
Range Land	801.53	59.00%
Recreation	0.08	0.01%
Religious Building	0.01	0.001%
Residential	17.55	1.29%
Scattered Industry	0.95	0.07%
Transportation	4.21	0.31%
Vacant Area	2.85	0.21%
Water Bodies	33.36	2.46%
Grand Total	1358.47	100%



Map 2-9: Existing Landuse Classification of Tehsil Daraban

2.4 Urban Centers Land Use Distribution

2.4.1 D.I. Khan City Urban Center

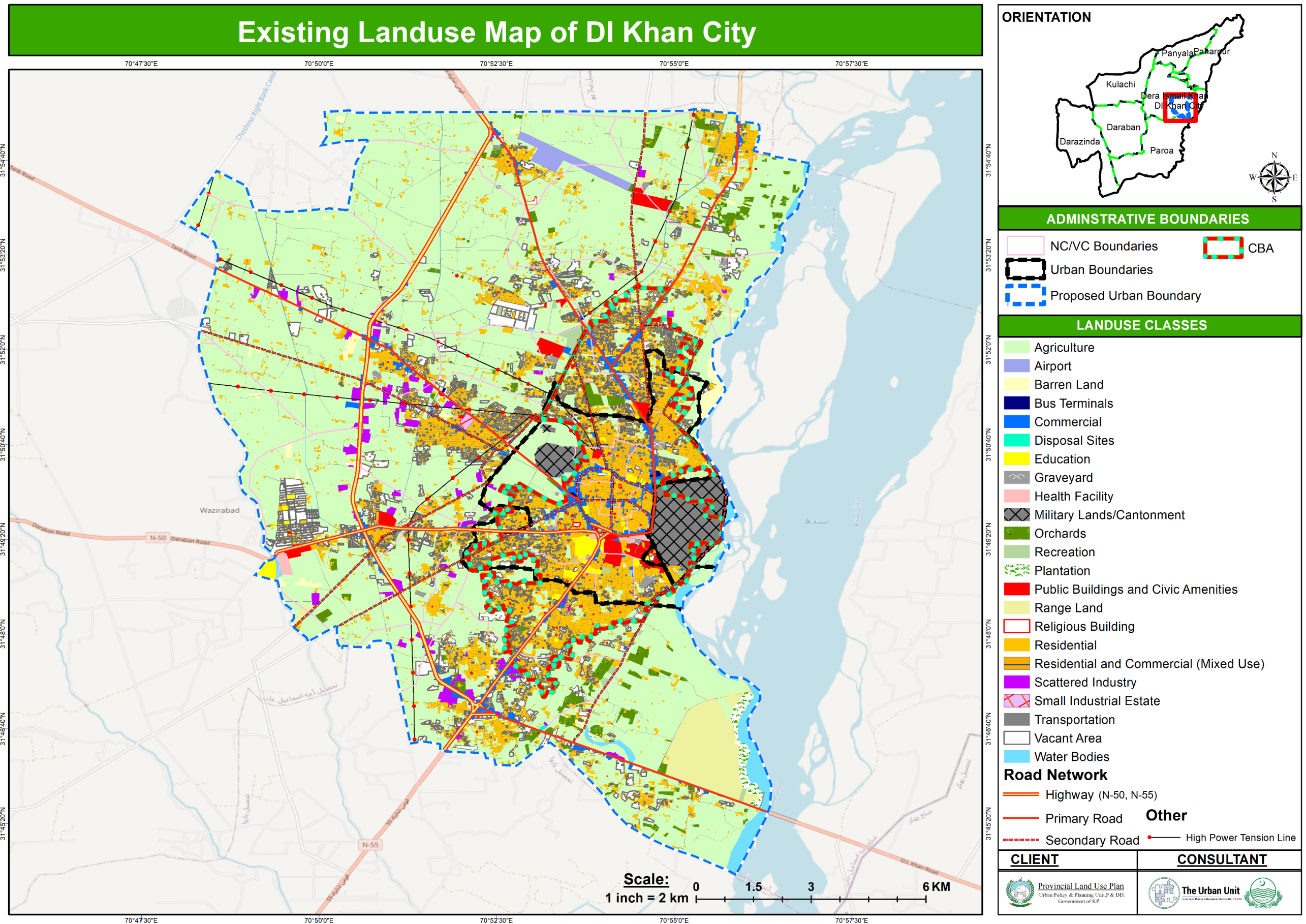
The D.I Khan City covers an area of **18060.8** hectares, displaying a range of land use types that reflect the urban and semi-urban character of the region. Residential areas dominate the built-up landscape, occupying **2727.53** hectares (**15.1%**) of the total area, underscoring the importance of housing and community living spaces. Agricultural land, covering **10658.2** hectares (**59%**), remains the single largest landuse as an essential component, highlighting the region's ties to agrarian activities. Commercial landuse span **362** hectares, making up **2%** of the area, serving as hubs for trade and local business activities.

Scattered industrial sites, although limited to **193.64** hectares (**1%**) along with a small industrial estate covering **8.95** hectares areas, contribute to the region's economy. The transport sector, occupying **641.11** hectares (**3.55**), is critical for facilitating mobility and regional connectivity. Education, health, religious and public buildings combinedly cover about **4%** of the total area, supporting the community with essential services and infrastructure.

Table below shows the details of the land use distribution of the D.I Khan City urban center, whereas **Map** shows the land use classification.

Table 2-10: Land Use Classification of D.I Khan City Urban Center (hectares)

Landuse	Compact	Outside Compact	Area (Ha)	Percentage
Agriculture	256.33	10400.11	10656.44	59.00%
Airport		79.15	79.15	0.44%
Barren Land	4.81	131.42	136.23	0.75%
Bus Terminals	3.47	0.57	4.03	0.02%
Commercial	213.46	148.53	361.99	2.00%
Disposal Site		1.75	1.75	0.01%
Education	93.67	41.84	135.51	0.75%
Graveyard	25.51	25.82	51.34	0.28%
Health Facility	16.38	16.77	33.15	0.18%
Military Lands/Cantonment	221.08	175.79	396.87	2.20%
Orchards	28.94	283.92	312.86	1.73%
Parks	9.13	39.57	48.71	0.27%
Plantation		60.79	60.79	0.34%
Public Buildings and Civic Amenities	81.74	86.88	168.62	0.93%
Range Land		356.41	356.41	1.97%
Religious Building	7.90	7.79	15.68	0.09%
Residential	1294.20	1433.33	2727.53	15.10%
Residential and Commercial (Mixed Use)	11.41	2.05	13.46	0.07%
Scattered Industry	2.42	191.22	193.64	1.07%
Small Industrial Estate		8.95	8.95	0.05%
Transportation	203.02	438.10	641.11	3.55%
Vacant Area	343.31	943.65	1286.96	7.13%
Water Bodies	0.79	368.83	369.62	2.05%
Grand Total	2817.57	15243.23	18060.80	100%



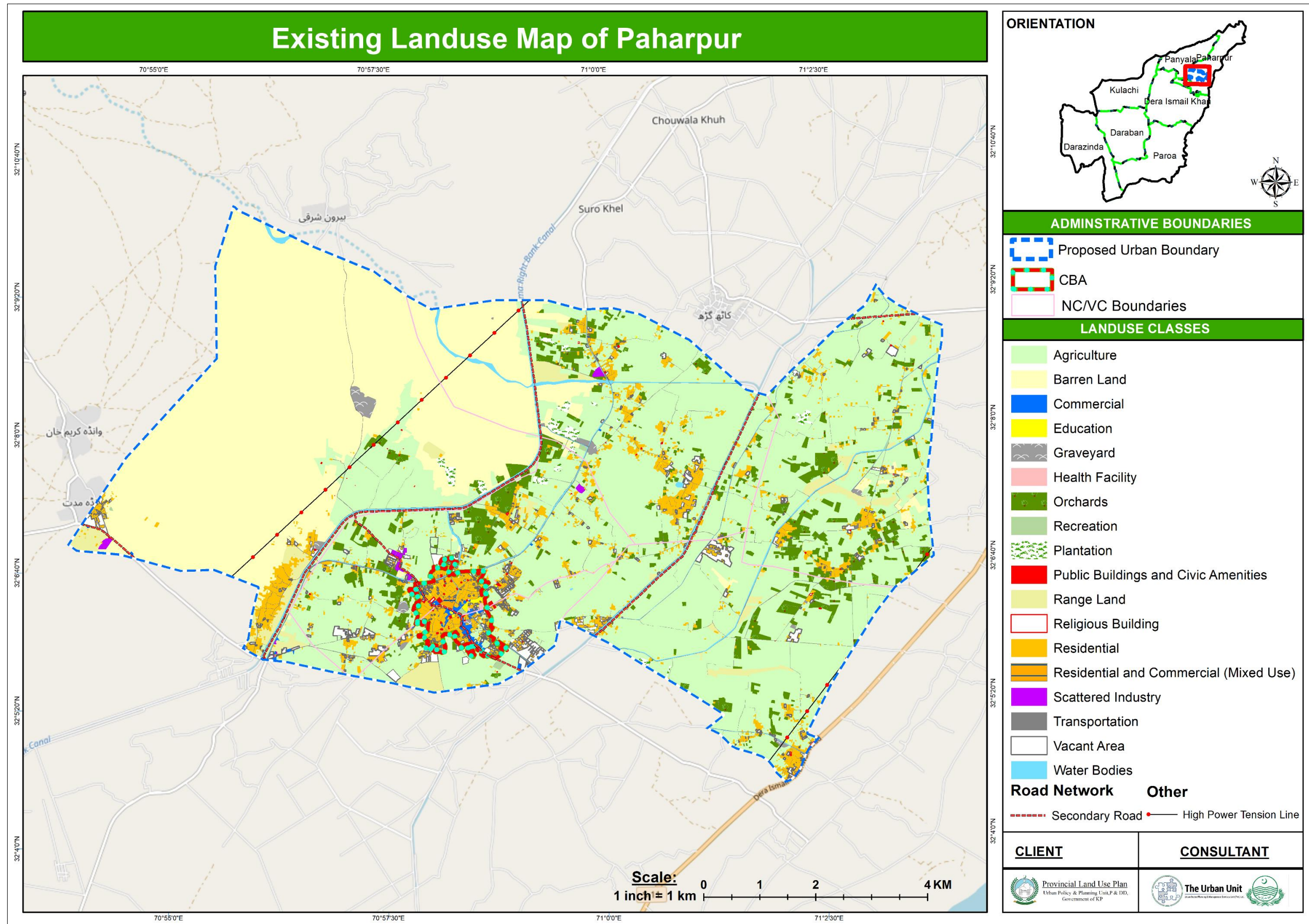
2.4.2 Paharpur Urban Center

The Paharpur Municipal Committee spans **9009** hectares, with diverse land uses reflecting the region's agricultural and community-oriented character. Agriculture dominates, covering **4348.7** hectares (**48.27%**), emphasizing the area's reliance on farming followed by Barren land **2867.74** hectares (**31.83%**), while rangeland occupies **213.65** hectares (**2.37%**), supporting grazing and natural open spaces. Residential zones cover **509.37** hectares (**5.65%**), providing housing, while commercial spaces **18.34** hectares, (**0.20%**) and mixed-use areas **6.01** hectares, (**0.07%**) add a small but notable blend of activities. Transportation infrastructure spans **147.93** hectares (**1.64%**), facilitating essential connectivity. Scattered industry (**12.64** hectares, **0.14%**) and public amenities—education **11.43** hectares, (**0.13%**), health **1.79** hectares, (**0.02%**), and civic facilities **3.63** hectares, (**0.04%**)—highlight the presence of necessary services within the town.

Table below shows the details of the land use distribution of the Paharpur urban center whereas **Map** shows the land use classification.

Table 2-11: Land Use Classification of Paharpur Urban Center (hectares)

Land use	Inside Compact	Outside Compact	Total	Percentage
Agriculture	6.20	4342.57	4348.77	48.27%
Barren Land	0.15	2867.58	2867.74	31.83%
Commercial	15.50	2.84	18.34	0.20%
Education	5.39	6.04	11.43	0.13%
Graveyard	1.47	31.11	32.58	0.36%
Health Facility	1.59	0.21	1.79	0.02%
Orchards	0.0003	475.55	475.55	5.28%
Plantation		42.93	42.93	0.48%
Public Buildings and Civic Amenities	1.62	2.01	3.63	0.04%
Range Land		213.65	213.65	2.37%
Recreation	1.85	6.27	8.13	0.09%
Religious Building	1.84	1.75	3.59	0.04%
Residential	90.60	418.77	509.37	5.65%
Residential and Commercial (Mixed Use)	5.58	0.43	6.01	0.07%
Scattered Industry		12.64	12.64	0.14%
Transportation	14.97	132.96	147.93	1.64%
Vacant Area	19.46	167.53	186.99	2.08%
Water Bodies	1.34	116.69	118.04	1.31%
Grand Total	167.57	8841.52	9009.09	100%



Map 2-11: Paharpur Urban Center Existing Landuse

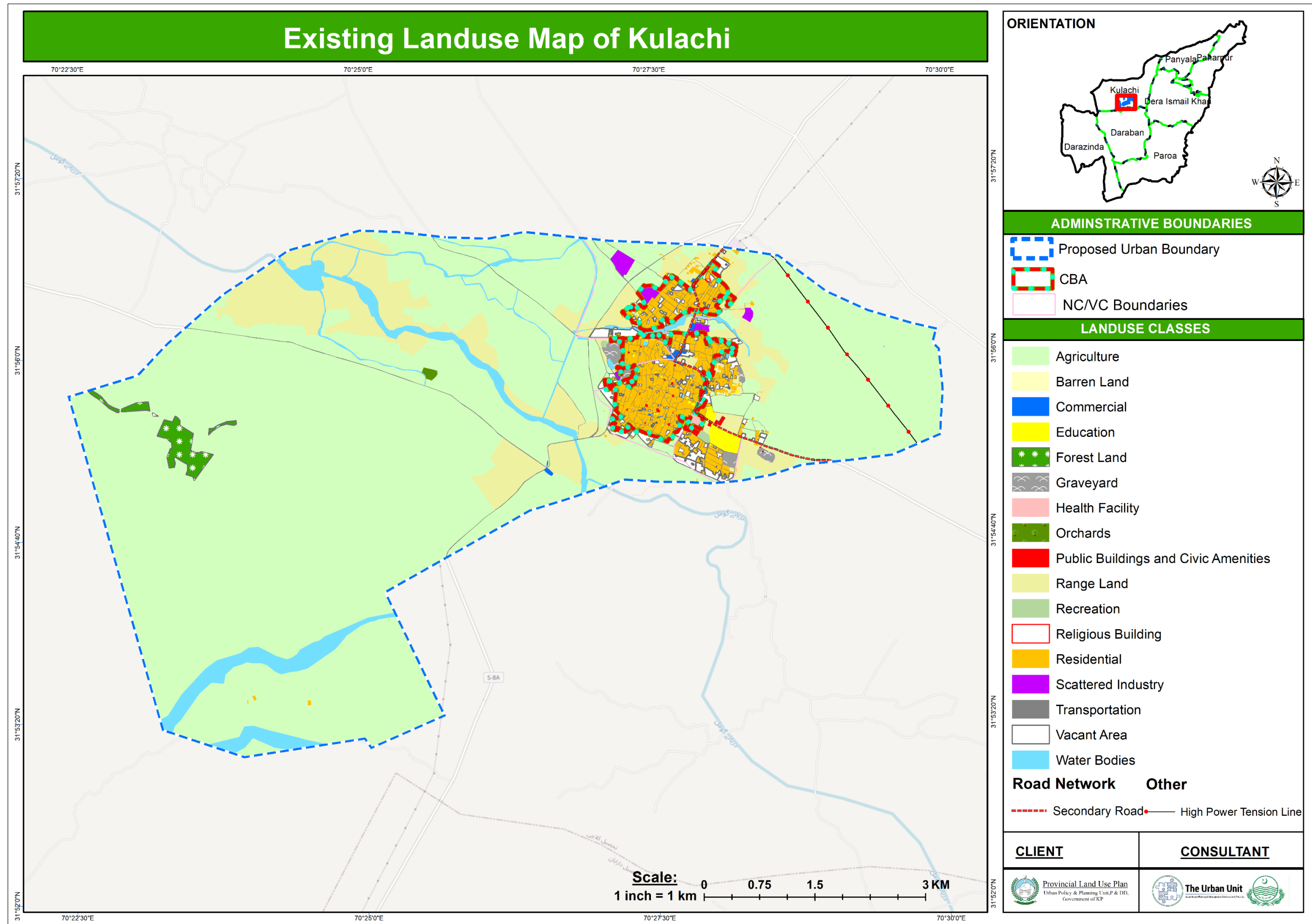
2.4.3 Kulachi Urban Center

The Kulachi Municipal Committee spans **4793.5** hectares with varied land uses. Agriculture dominates, covering **3669.2** hectares (**76.55%**), reflecting the area's reliance on farming, while rangeland accounts for **505** hectares (**10.5%**) for grazing and open space. Residential areas occupy **196.1** hectares (**4.09%**), and commercial areas cover **4.4** hectares (**0.09%**), indicating limited urban commerce. Scattered industry **15.64** hectares, (**0.33%**), transportation infrastructure **54.91** hectares, (**1.15%**), and public amenities provide essential services including education **15.74** hectares (**0.33%**), health **2.28** hectares, (**0.05%**), religious buildings **1.90** hectares, (**0.04%**). In natural landuse, forest land and water bodies, enhancing environmental diversity occupies **33.18** (**0.69%**) and **194.6** (**4%**) hectares respectively.

Table below shows the details of the land use distribution of the Kulachi urban center whereas **Map** shows the land use classification.

Table 2-12: Land Use Distribution of Kulachi Urban Center (hectares)

Land Use	Inside Compact	Outside Compact	Total	Percentage
Agriculture	0.44	3668.76	3669.20	76.55%
Barren Land		0.11	0.11	0.00%
Commercial	2.54	1.85	4.40	0.09%
Education	2.42	13.32	15.74	0.33%
Forest Land		33.18	33.18	0.69%
Graveyard	0.31	17.54	17.85	0.37%
Health Facility	2.28	0.00	2.28	0.05%
Orchards		2.40	2.40	0.05%
Public Buildings and Civic Amenities	0.96	2.34	3.30	0.07%
Range Land	3.02	501.99	505.02	10.54%
Recreation		2.49	2.49	0.05%
Religious Building	1.54	0.37	1.90	0.04%
Residential	157.50	38.57	196.06	4.09%
Scattered Industry	4.42	11.22	15.64	0.33%
Transportation	21.97	32.94	54.91	1.15%
Vacant Area	19.19	55.21	74.40	1.55%
Water Bodies	1.42	193.20	194.62	4.06%
Grand Total	218.01	4575.49	4793.50	100%

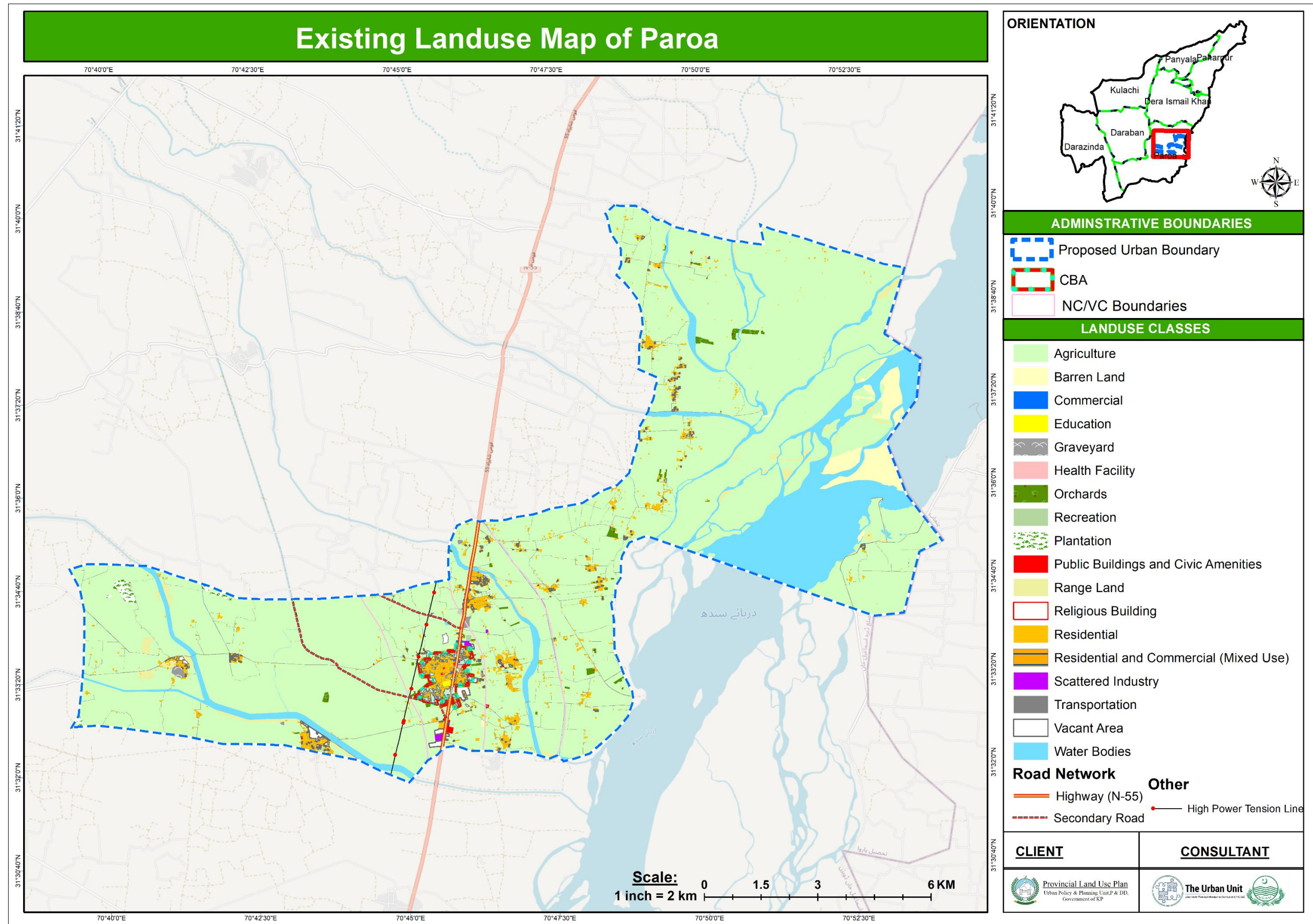


2.4.4 Paroa Urban Center

The Paroa Municipal Committee covers a total urban area of **138238** hectares, with agriculture as the predominant land use, spanning **11041** hectares (**79.87%**), underscoring the region's agricultural focus. Water bodies occupy a significant portion, covering **1581** hectares (**11.44%**), which adds to the area's environmental diversity. Residential areas make up **390** hectares (**2.82%**), providing housing, while range land covers **142.6** hectares (**1.03%**), contributing open spaces. Commercial activities and other mixed-use spaces are minimal, with commercial land at **13.5** hectares (**0.10%**) and mixed-use at **1.71** hectares. Additionally, transportation infrastructure spans **147.9** hectares (**1.07%**), aiding in regional connectivity, while scattered industry, public amenities, education, and health facilities occupy small portions, reflecting a balanced but agriculturally driven urban landscape. The **Table** below show land use classification of Paroa urban center accompanied by **Map** showing the landuse classification.

Table 2-13: Land use distribution of Paroa Urban Center (hectares)

Land use	Inside Compact	Outside Compact	Total	Percentage
Agriculture	1.66	11039.55	11041.21	79.87%
Barren Land		245.34	245.34	1.77%
Commercial	9.48	4.02	13.50	0.10%
Education	5.44	5.35	10.79	0.08%
Graveyard	0.36	16.31	16.67	0.12%
Health Facility	1.76	0.00	1.76	0.01%
Orchards	0.31	50.66	50.98	0.37%
Plantation		36.43	36.43	0.26%
Public Buildings and Civic Amenities	0.06	5.50	5.56	0.04%
Range Land		142.60	142.60	1.03%
Recreation	1.47	5.01	6.48	0.05%
Religious Building	0.39	0.80	1.19	0.01%
Residential	78.11	311.98	390.09	2.82%
Residential and Commercial (Mixed Use)	1.67	0.04	1.71	0.01%
Scattered Industry		8.61	8.610	0.06%
Transportation	12.00	135.97	147.97	1.07%
Vacant Area	28.46	92.49	120.95	0.87%
Water Bodies	1.21	1580.76	1581.97	11.44%
Grand Total	142.39	13681.43	13823.82	100%



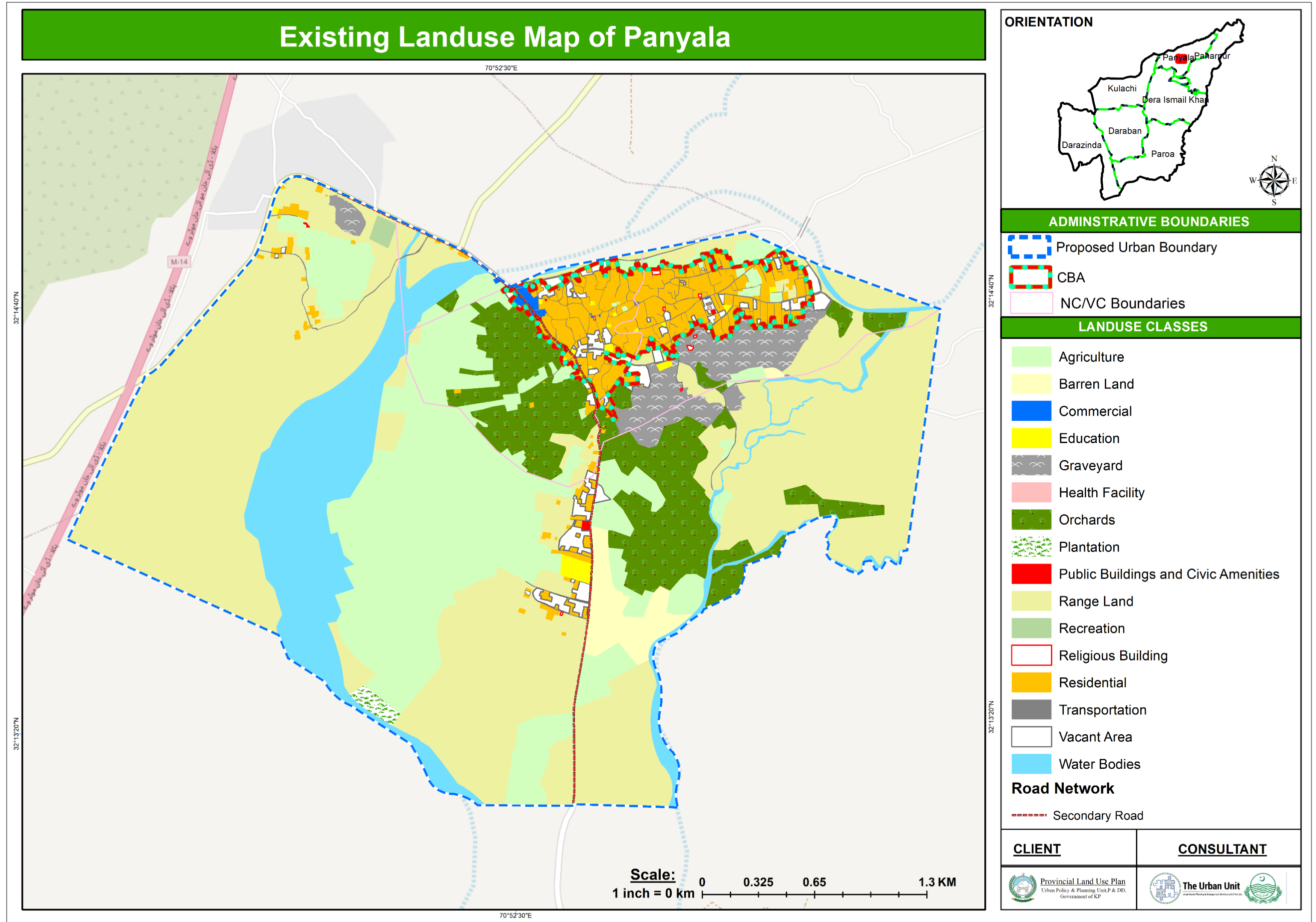
Map 2-13: Paroa Urban Center Existing Landuse

2.4.5 Panyala Urban Center

Panyala urban center covers a total of **1123.4** hectares with a diverse land use pattern. Rangeland is the largest category, occupying **499.39** hectares (**44.45%**), highlighting its importance in grazing. Agriculture follows covering **229.14** hectares (**20.40%**), contributing significantly to food security. Orchards spans **107.15** hectares (**9.54%**), supporting agriculture. Transportation infrastructure takes up **13.72** hectares (**1.22%**), while commercial areas and vacant spaces occupy **2.22** hectares (**0.2%**) and **19.61** hectares (**1.75%**) respectively. Smaller land uses include health, education, religious buildings, and commercial combinedly covers less than **1%** of the total area. The **Table** shows the land use distribution of Panyala urban center whereas **Map** visually shows the land use classification.

Table 2-14: Land use Distribution of Panyala Urban Center (hectares)

Land use	Inside Compact	Outside Compact	Total	Percentage
Agriculture	2.22	226.92	229.14	20.40%
Barren Land		19.30	19.30	1.72%
Commercial	2.04	0.18	2.22	0.20%
Education	1.17	2.57	3.74	0.33%
Graveyard		37.88	37.88	3.37%
Health Facility	0.09	0.00	0.09	0.01%
Orchards	0.002	107.15	107.15	9.54%
Plantation		2.79	2.79	0.25%
Public Buildings and Civic Amenities	0.07	0.31	0.39	0.03%
Range Land	0.75	498.64	499.39	44.45%
Recreation		1.81	1.81	0.16%
Religious Building	0.23	0.15	0.38	0.03%
Residential	55.17	9.50	64.67	5.76%
Transportation	6.08	7.64	13.72	1.22%
Vacant Area	6.20	13.41	19.61	1.75%
Water Bodies		121.12	121.12	10.78%
Grand Total	74.02	1049.37	1123.40	100%



Map 2-14: Panyala Urban Center Existing Landuse

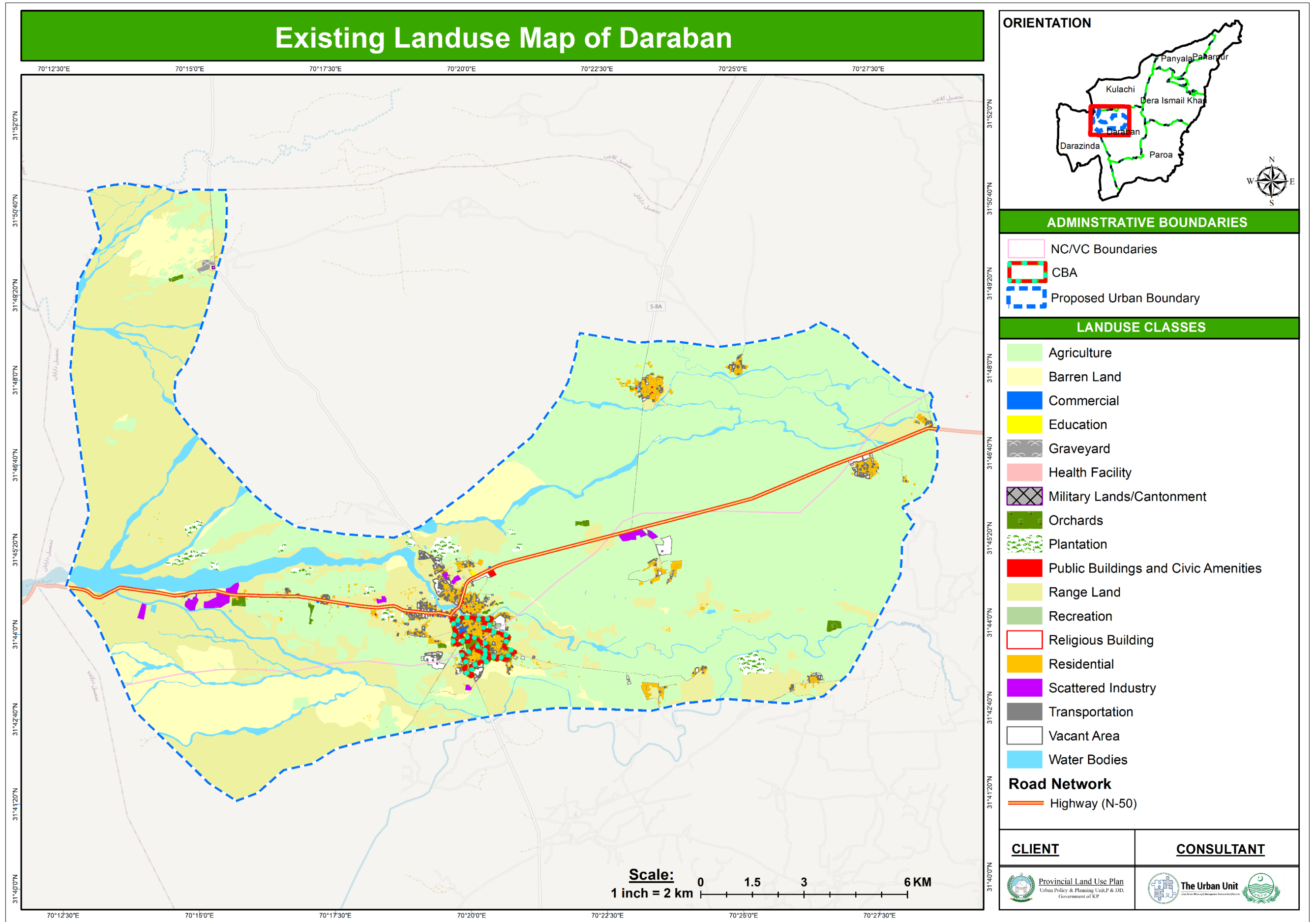
2.4.6 Daraban Urban Center

Daraban Town Committee covers a total area of **23395.78** hectares, with a substantial portion of the land occupied by range land **6957** hectares (**29.74%**), highlighting the area's reliance on grazing and open natural landscapes. Agriculture is the largest land use, covering **12145** hectares (**51.91%**), underscoring its importance in the local economy. Barren land comprises **2019** hectares (**8.63%**), indicating undeveloped areas. Water bodies make up **1176.75** hectares (**5.03%**), adding environmental diversity.

Residential areas occupy **381.9** hectares (**1.63%**), while orchards and plantation cover **54.2** (**0.23%**) and **167.4** (**0.72%**) hectares providing space for both green cover and fruit cultivation. Other land uses, such as commercial, education, health facilities, religious and public buildings, combinedly occupy less than **1%** of the total area. The **Table** below show land use classification of Paroa urban center accompanied by **Map** showing the landuse classification.

Table 2-15: Landuse distribution of Daraban Urban Center (hectares)

Landuse	Compact	Outside Compact	Total	Percentage
Agriculture	1.52	12143.65	12145.17	51.91%
Barren Land	0.01	2018.90	2018.92	8.63%
Commercial	9.85	13.36	23.21	0.10%
Education	2.14	4.76	6.90	0.03%
Graveyard		12.01	12.01	0.05%
Health Facility	0.48	0.28	0.76	0.003%
Military Lands/Cantonment	0.39	0.59	0.98	0.004%
Orchards	0.37	53.83	54.20	0.23%
Plantation		167.45	167.45	0.72%
Public Buildings and Civic Amenities	6.93	4.18	11.11	0.05%
Range Land	0.22	6956.75	6956.96	29.74%
Recreation		3.27	3.27	0.01%
Religious Building	0.36	0.48	0.84	0.004%
Residential	89.20	292.70	381.90	1.63%
Scattered Industry		85.64	85.64	0.37%
Transportation	11.01	94.59	105.61	0.45%
Vacant Area	14.11	229.99	244.10	1.04%
Water Bodies	0.08	1176.67	1176.75	5.03%
Grand Total	136.67	23259.11	23395.78	100%



Map 2-15: Daraban Urban Center Existing Landuse

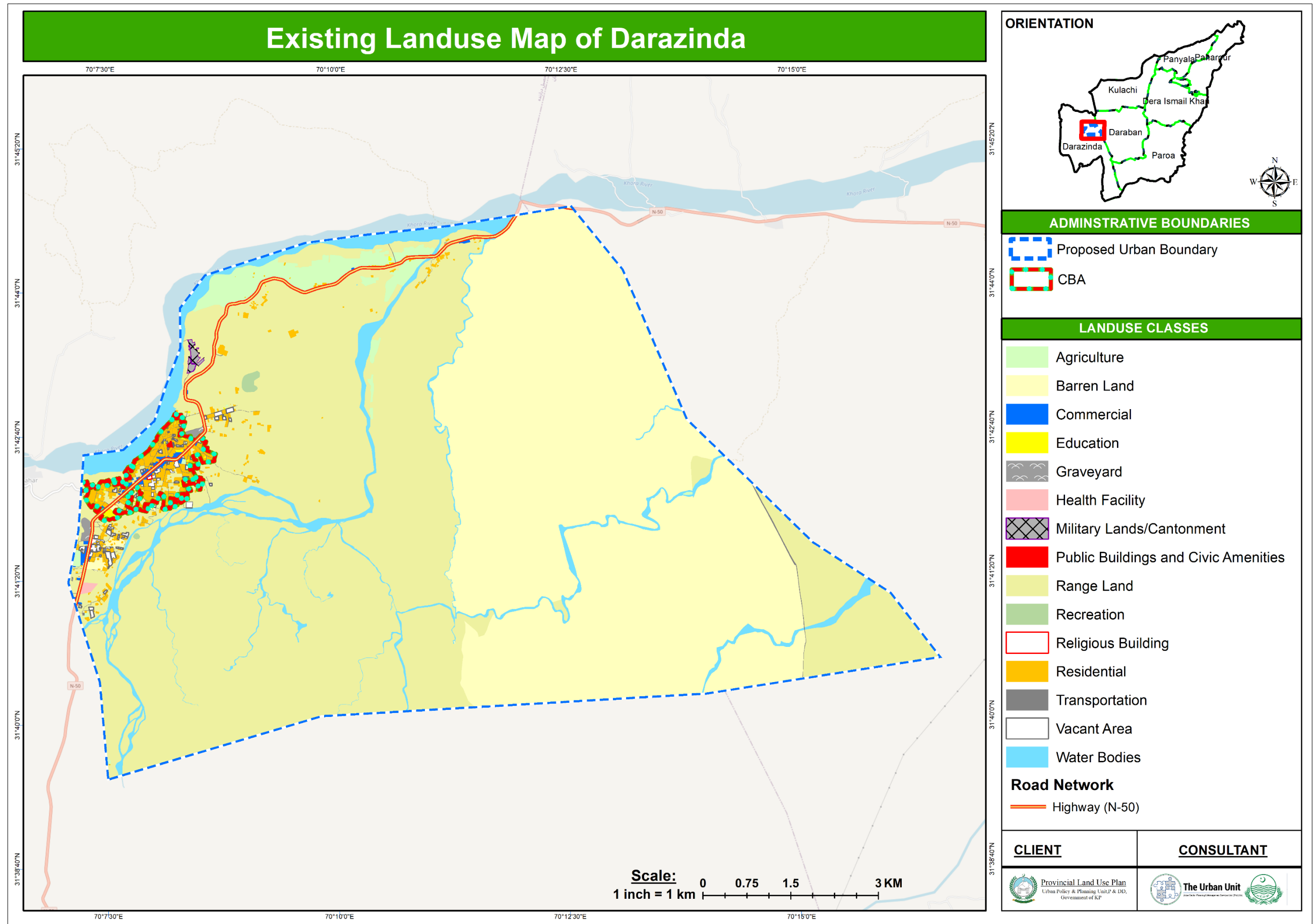
2.4.7 Darazinda Urban Center

Darazinda urban center covers a total area of **8914** hectares, with a substantial portion of the land occupied by range and barren land. Rangeland with **4391.38 (49.26%)** hectares followed by barren land **3601 (40.40%)** hectares are most pre dominant of the land uses combinedly covering around **90%** of the total area. Other prominent landuse includes water bodies **465.57 (5.22%)** and agriculture **173.82 (1.95%)** of the total land use.

Residential areas occupy **147.73 (1.66%)**, while commercial use is **18.78 (0.21%)**, providing space for both housing and commerce. Recreation, at **8.72 (0.1%)**, and transportation infrastructure, at **38.33 (0.43%)**, support economic activities and connectivity. Other land uses, such as education, health facilities, religious and public buildings, occupy less than **1%** of the total area. The **Table** below show land use classification of Paroa urban center accompanied by **Map** showing the landuse classification.

Table 2-16: Landuse distribution of Darazinda Urban Center (hectares)

Land Use	Inside Compact	Outside Compact	Total	Percentage
Agriculture	0.91	172.90	173.82	1.95%
Barren Land	1.25	3599.86	3601.12	40.40%
Commercial	12.09	6.69	18.78	0.21%
Education	6.81	0.93	7.74	0.09%
Graveyard		10.69	10.69	0.12%
Health Facility		3.99	3.99	0.04%
Military Lands/Cantonment		8.24	8.24	0.09%
Public Buildings and Civic Amenities	0.88	0.01	0.89	0.01%
Range Land	16.83	4374.56	4391.38	49.26%
Recreation	0.05	8.67	8.72	0.10%
Religious Building	0.57	0.03	0.60	0.01%
Residential	96.68	51.06	147.73	1.66%
Transportation	12.98	25.36	38.33	0.43%
Vacant Area	13.14	23.40	36.54	0.41%
Water Bodies	0.00	465.57	465.57	5.22%
Grand Total	162.19	8751.96	8914.15	100%



Map 2-16: Darazinda Urban Center Existing Landuse

3. PROPOSED LAND USE ZONING

Land use planning is integral to building and managing cities and towns. It involves looking at how land should be used, ranging from green space to residential areas and industrial sites. It's also the basis of zoning laws and restricts particular land use. Careful planning also helps reduce our environmental footprint by ensuring that resources are managed responsibly. As a result, it helps preserve the environment, conserve resources, promote social gatherings, enhance communities, and support transportation, industry, and economic activity.

The proposed land use plan is formulated to accommodate the projected population growth and associated land use demands over the next two decades. This plan not only addresses the needs of an expanding population but also aims to conserve critical values related to heritage, environment and food chain. The land use strategy is designed to balance urban expansion with the preservation of rural land, ensuring sustainable growth across the district.

3.1 Land Use Planning through Zoning

Zoning is a pivotal regulatory tool in urban and regional planning, used to manage land development in a way that promotes orderly growth and protects public interests. Through the division of land into well-defined zones, each with specific regulations regarding use, intensity, and built form, zoning ensures that spatial development aligns with broader policy objectives such as public health and safety, environmental sustainability, economic efficiency, and social equity.

The proposed zoning framework encompasses a broad spectrum of land use categories to accommodate anticipated spatial needs and promote balanced regional development. These designated zones include: Residential Zone, Educational Zone, Health Zone, Agricultural Zone, Industrial Zone, Recreational Zone, Mixed-Use Zone, and the Central Business District (CBD). This typology provides the institutional structure for integrated and controlled land development, enabling the district to evolve in a sustainable, inclusive, and economically dynamic manner.

While zoning offers the legal and regulatory mechanism for implementation, land use planning delivers the strategic vision—integrating spatial, socio-economic, and environmental considerations into a cohesive framework. Together, they form the backbone of sound urban governance, ensuring that future growth is not only feasible but also desirable in terms of livability, functionality, and resilience.

To support spatial planning decisions, population projections for the plan horizon were derived using demographic trend analysis. Based on these projections, future housing demand was calculated and integrated with the existing housing backlog to estimate the total residential unit requirement. The gross residential land has been obtained from the proposed densities, which were derived from existing densities and then appropriately densified.

3.2 District D.I. Khan Proposed Land Use

The 2045 Land Use Plan for District D.I. Khan establishes a strategic framework balancing ecological preservation, agricultural productivity, and measured urban growth. More than 80 % of the proposed zoning is designated as Agriculture and Rangeland to safeguard watershed functions and enhance habitat connectivity. Agricultural lands comprise 36.54% of total proposed zones, ensuring continuity in crop cultivation and reinforcing food security objectives. By dedicating almost one-third of its land to agriculture, the plan reinforces zoning regulations that advocate for sustainable farming practices and long-term rural economic stability. District D.I. Khan allocates 2141 hectares (0.26%) of its zoning as Riverine Forests, aligning with large-scale forest restoration principles to increase biodiversity resilience and mitigate climate change impacts along with 686.05 hectares (0.08%) of recreational zones to increase the overall green/open space.

In built up landuse, residential zones cover just over 1.29% of the land to deliver targeted housing growth without compromising the district's rural character. 0.1% of total proposed zoning of land has been allocated to Commercial and Mix Use Zone to foster active living and economic vitality by integrating residential, commercial, and recreational functions in close proximity. Educational, Health, Public Buildings

which combinedly form the institutional use covers 0.06% of the total district land. Industrial zones collectively occupy under 0.02 % of the area, demonstrating a compact service-delivery paradigm that maximizes infrastructure efficiency and supports equitable access to public services.

In other land uses, landfill sites, wastewater treatment plants, bus terminals, logistic facilities combinedly occupy less than 1% of the proposed zoning. This integrated land use framework positions District D.I. Khan to achieve balanced economic growth, strengthen environmental stewardship, and enhance social well-being through 2045.

District D.I. Khan proposed zoning calculations are given in the **Table** below:

Table 3-1: D.I. Khan District Proposed Zoning Statistics

Landuse	Area in hectares	Percentage out of Proposed Zones
Agriculture Zone	295443.04	36.54%
Barren Land	127614.49	15.78%
Buffer Zone	27.24	0.003%
Bus Terminals	11.38	0.001%
CBD	138.07	0.02%
Educational Zone	160.68	0.02%
Health Zone	134.41	0.02%
Industrial Zone	166.17	0.02%
Landfill	27.55	0.003%
Logistic Facility	1.62	0.0002%
Mix Use Zone	625.34	0.08%
Public Buildings	148.62	0.02%
Range Land	354595.62	43.86%
Recreational Zone	686.05	0.08%
Residential Zone	10453.10	1.29%
Riverine Forest	2141.49	0.26%
Urban Farm Land	15818.76	1.96%
WWTP	300.43	0.04%
Grand Total	808494.1	100%

Below **Map** visualizes the proposed zoning of District D.I. Khan followed by **Tabulated** area statement of the existing and proposed statistics of the district.

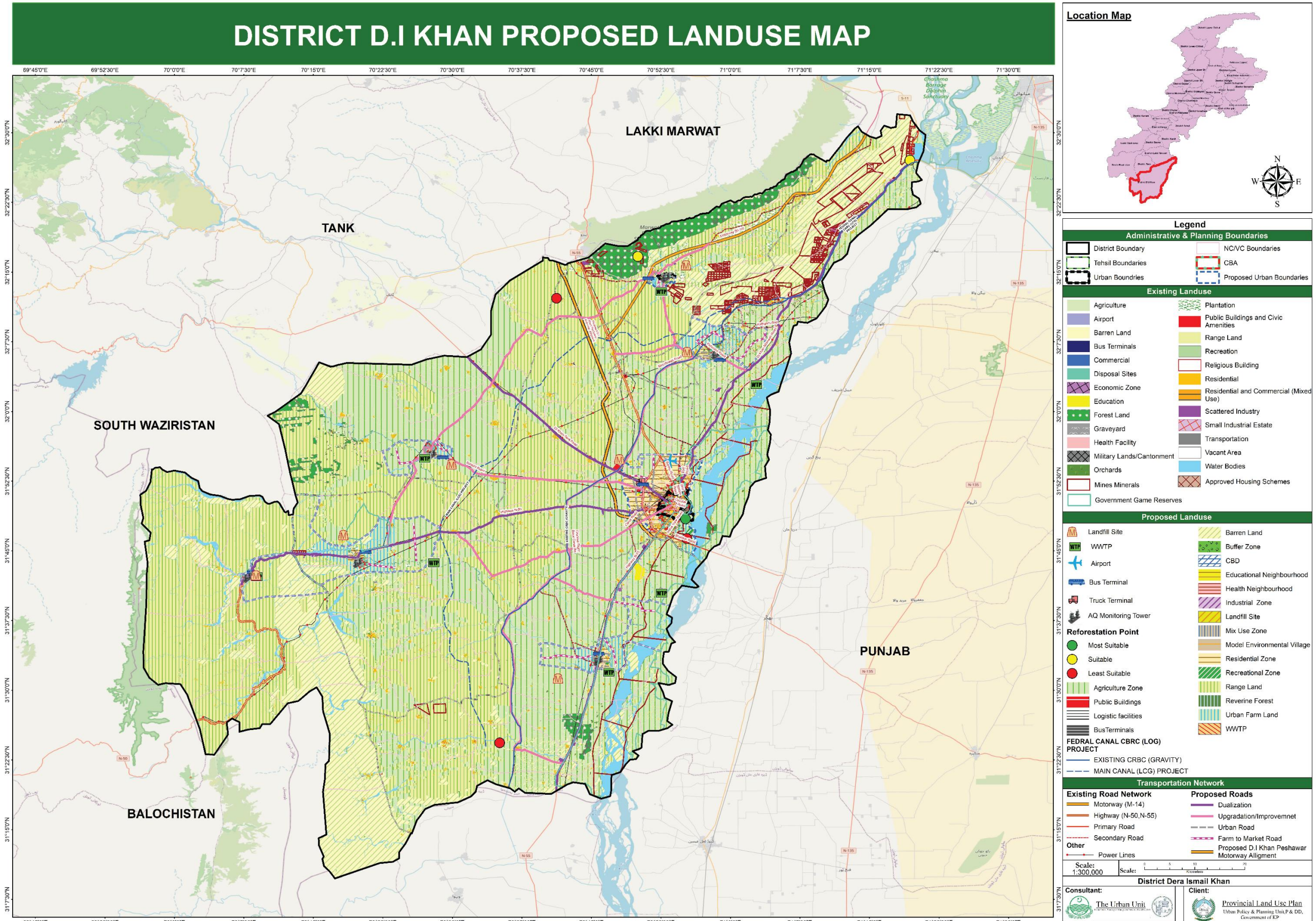


Table 3-2: Dera Ismail Khan District Area Statement of Existing and Proposed Land Uses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of Existing and Proposed	Landuse Percentages	NRM Percentages
Residential	Residential	17093.97	Residential	10453.10	27547.07	3.1%	24 - 50%
	Mixed Use	21.73	Mixed Use (Residential)	250.14	271.87		
	Total	17115.70	Total	10703.24	27818.94		
Commercial	Commercial	660.68	Mix Use (Commercial)	250.14	1048.89	0.1%	0.5 - 5%
			CBD	138.07			
	Total	660.68	Total	388.21			
Institutional	Education	816.28	Educational	160.68	1728.25	0.2%	2-21%
	Health Facility	56.67	Health	134.41			
	Public Buildings and Civic Amenities	363.26	Public Buildings	148.62			
	Religious Building	48.32					
	Total	1284.54	Total	443.72			
Industrial	Scattered Industry	1467.37	Industrial Zone	166.17	1702.20	0.2%	2-20%
	Small Industrial Estate	8.95					
	Economic Zone	59.70					
	Total	1536.02	Total	166.17			
Recreational/Open Space	Recreation	415.45	Recreation Zone	686.05	1101.50	0.1%	0.5-7 %
	Total	415.45	Total	686.05			
Arterial Circulation/Terminals	Transportation	5943.93	Bus Terminals	11.38	6047.27	0.7%	2-29%
	Bus Terminals	11.20	Logistics Facility	1.62			
	Airport	79.15					
	Total	6034.27	Total	13.00			
Other Uses	Agriculture	316247.23	Agriculture	295443.04	866078.20	95.6%	-
	Barren Land	130764.78	Barren land	127614.49			
	Disposal Site	1.75	Buffer Zone	27.24			
	Graveyard	582.13	Landfill sites	27.55			
	Orchards	3280.50	Mix Use (Public Amenities)	125.07			
	Military Lands/Cantonment	406.08	Rangeland	354595.62			
	Range Land	357261.67	Riverine Forest	2141.49			
	Vacant Area	4220.04	Urban Farmland	15818.76			
	Plantation	3625.00	WWTP	300.43			
	Forest Land	21002.31					
	Water Bodies	41086.73					
	Total	878478.22	Total	796093.70			
Grand Total	905525	Grand Total	808494	905525	100%		

3.3 Urban Centers

The proposed zoning framework encompasses a broad spectrum of land use categories to accommodate anticipated spatial needs and promote balanced regional development. While zoning offers the legal and regulatory mechanism for implementation, land use planning delivers the strategic vision—integrating spatial, socio-economic, and environmental considerations into a cohesive framework. Together, they form the backbone of sound urban governance, ensuring that future growth is not only feasible but also desirable in terms of livability, functionality, and resilience. These designated zones include Residential, Mixed Use, CBD, Educational, Health and Public Buildings, Industrial and Recreational. This typology provides the institutional structure for integrated and controlled land development, enabling the district to evolve in a sustainable, inclusive, and economically dynamic manner. The proposed land use for each proposed urban center is given below:

3.3.1 D.I. Khan City

The proposed land use plan of D.I. Khan City covers a total area of 12436 hectares, distributed across various planning classes to ensure balanced growth and sustainable urban development. The largest share is allocated to the Residential Zone, occupying 7919 hectares (63.68%) to meet the growing housing demand of the city's population. Agriculture Zone covers 1831.21 hectares (14.73%), retaining space for local cultivation and food security along with 1332.21 hectares (10.71%) allocated for Urban farmlands. Mix Use zone has been designated as 516.94 hectares (4.16%) to accommodate integrated commercial and residential functions.

The Central Business District (CBD), spread over 107.2 hectares (0.86%), will serve as the commercial hub, whereas the Industrial Zone, with 38 hectares (0.31%), provides space for industries and employment opportunities. Recreational areas account for 417.52 hectares (3.36%), ensuring open spaces and community well-being along with 17.55 hectares (0.14%) is preserved as Riverine Forest for ecological balance and flood protection.

The social infrastructure is supported through the allocation of 98 hectares (0.79%) for education, 63.21 hectares (0.51%) for health facilities, and 83.1 hectares (0.67%) for public buildings. Additionally, 8.51 hectares (0.1%) have been allocated for Buffer Zones to act as transitional and protective spaces between sensitive land uses.

The Logistic Facility (Truck Terminal) occupies an area of 1.62 hectares strategically allocated to support goods movement and transportation activities. Its location facilitates efficient loading, unloading, and distribution of freight, reducing congestion in other parts of the urban area. Similarly, the Bus Terminal covers an area of 1.63 hectares, providing essential infrastructure for intercity and intracity passenger transport. The terminal is planned to enhance public mobility, streamline traffic flow, and ensure convenient access for commuters.

Overall, the proposed land use reflects a comprehensive and sustainable approach by prioritizing residential needs, supporting economic growth, and safeguarding ecological resources for the future development of D.I. Khan City.

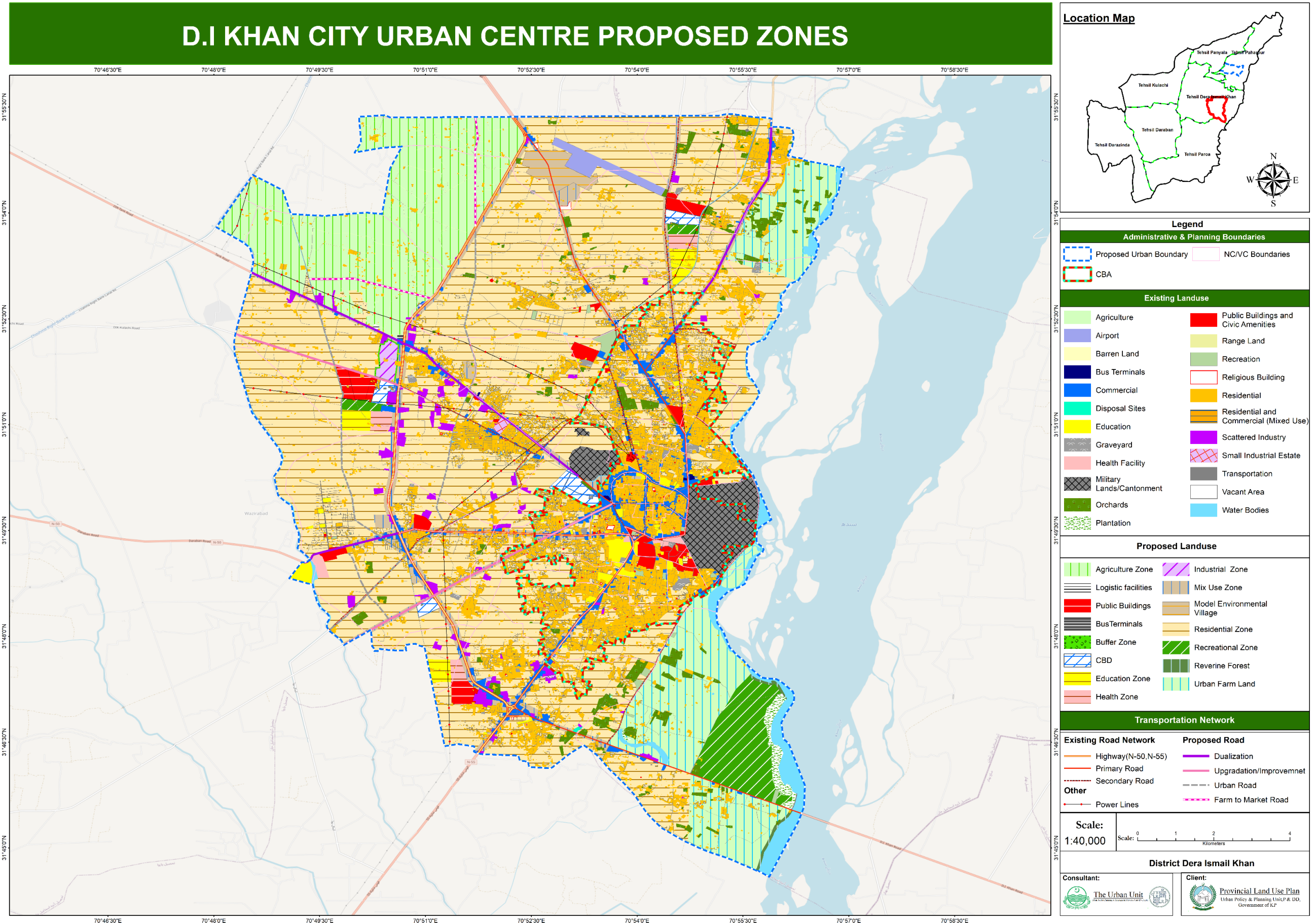
Table 3-3: D.I. Khan City Proposed Zones Area

Proposed Zones	Area in Hectares	Percentage
Agriculture	1831.21	14.73%
Buffer Zone	8.51	0.07%
Bus Terminal	1.63	0.01%
CBD	107.20	0.86%
Educational	97.97	0.79%
Health	63.21	0.51%
Industrial	38.01	0.31%
Logistic Facility	1.62	0.01%
Mix Use	516.94	4.16%
Public Buildings	83.08	0.67%
Recreation	417.52	3.36%
Residential	7919.38	63.68%
Riverine Forest	17.55	0.14%
Urban Farmland	1332.21	10.71%
Grand Total	12436.04	100%

The draft land use plan for D.I. Khan city urban center shows a major restructuring to meet observed range of landuse coverage in the NRM of Planning and Infrastructure standards to support organized growth. Residential land use rises to 60%, which is above observed 24–50% range, indicating a strong focus on housing provision but necessitating future control over urban density.

Commercial and institutional allocations, at 4% and 3% respectively, fall well within NRM percentages, supporting employment and public service needs. Recreational spaces, at 3%, align well with livability goals. Similarly, arterial/transportation network at 4% is also within the observed landuse percentage of 2-21%.

The proposed zoning is shown below in **Map** followed by **Table** showing area statement of existing and proposed statistics of D.I. Khan urban center.



Map 3-2: Proposed Zones of D.I. Khan City

Table 3-4: D.I. Khan City Area Statement of Existing and Proposed Land Uses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of existing and proposed	Landuse Percentages	NRM Percentages
Residential	Residential	2727.53	Residential	7919.38	10646.92	60%	24 - 50%
	Residential and Commercial (Mixed Use)	13.46	Mix Use (Residential)	206.78	220.24		
	Total	2740.99	Total	8126.16	10867.16		
Commercial	Commercial	361.99	Mix Use (Commercial)	206.78	675.97	4%	0.5 - 5%
			CBD	107.20			
	Total	361.99	Total	313.97			
Institutional	Education	135.35	Education	97.97	597.06	3%	2-21%
	Health Facility	33.15	Health	63.21			
	Public Buildings and Civic Amenities	168.62	Public Buildings	83.08			
	Religious Building	15.68					
	Total	352.81	Total	244.26			
Industrial	Scattered Industry	193.80	Industrial Zone	38.01	240.76	1%	2-20%
	Small Industrial Estate	8.95					
	Total	202.75	Total	38.01			
Recreational/ Open Space	Recreation	48.71	Recreational Zone	417.52	466.23	3%	0.5-7 %
	Total	48.71	Total	417.52			
Arterial Circulation/Terminals	Transportation	641.11	Bus Terminal	1.63	727.54	4%	2-29%
	Bus Terminals	4.03	Logistic Facility	1.62			
	Airport	79.15					
	Total	724.29	Total	3.25			
Other Uses	Agriculture	10656.44	Agriculture Zone	1831.21	4486.09	25%	-
	Barren Land	136.23	Buffer Zone	8.51			
	Disposal Site	1.75	Mix Use (Public Amenities)	103.39			
	Graveyard	51.34	Riverine Forest	17.55			
	Military Lands/Cantonment	396.87	Urban Farmland	1332.21			
	Orchards	312.86					
	Plantation	60.79					
	Range Land	356.41					
	Vacant Area	1286.96					
	Water Bodies	369.62					
Total	13629.26	Total	3292.87				
Grand Total	18060.8	Grand Total	12436.0	18060.8	100%		

3.3.2 Paharpur

The proposed land use plan covers a total of 7617.7 hectares, with the majority allocated to the Urban Farmland occupying 3695.96 hectares (48.52%). Since most of the area in Paharpur comprises agricultural land, its preservation in the plan is prioritized with 2239 hectares (29.39%) occupied by agriculture zone. The Residential Zone is the third largest category, covering 695 hectares (9.13%), aimed at fulfilling the housing demand of the growing urban population. Mix Use Zone extend over 55.97 hectares (0.73%), providing integrated spaces for commercial and residential activities. Industrial activities are planned on 47.77 hectares (0.63%), while the Central Business District (CBD), covering 6.33 hectares (0.08%), is proposed as the city's commercial core.

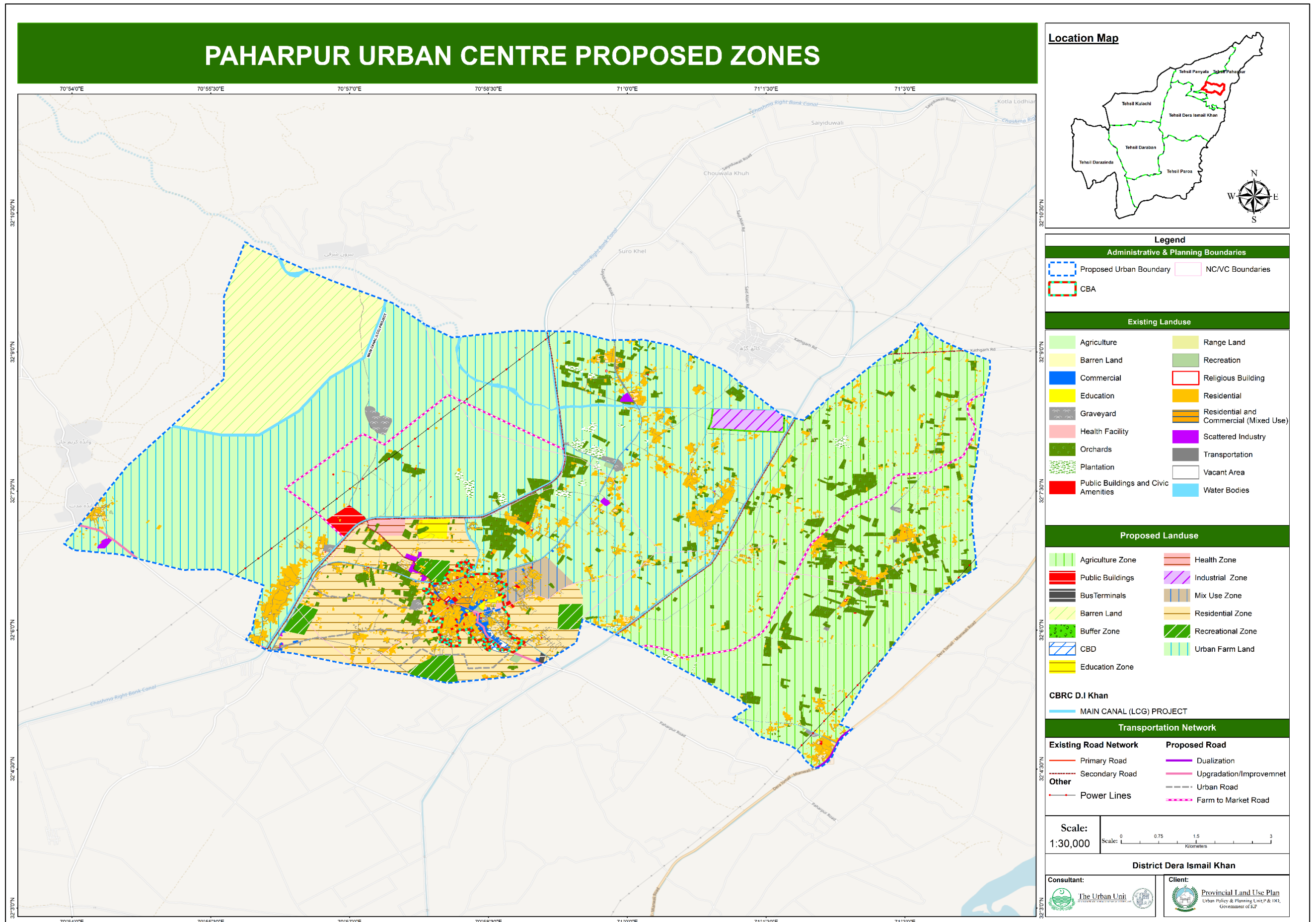
Social infrastructure has also been considered, with 18.35 hectares (0.24%) allocated to educational uses, 18.33 hectares (0.24%) to health facilities, and 20.44 hectares (0.27%) for public buildings. Recreational areas, totaling 90.64 hectares (1.19%), ensure spaces for leisure and community interaction. Additionally, 6.12 hectares (0.08%) have been occupied by Buffer Zones to provide a safe transition between different land uses.

Overall, the land use distribution emphasizes a balanced approach that prioritizes agriculture and housing while also integrating economic, social, and ecological functions for sustainable development.

Table 3-5: Paharpur Urban Center Proposed Zones Area

Landuse	Area (Ha)	Percentage
Agriculture Zone	2239.01	29.39%
Barren Land	721.91	9.48%
Buffer Zone	6.12	0.08%
Bus Terminal	1.62	0.02%
CBD	6.33	0.08%
Educational Zone	18.35	0.24%
Health Zone	18.33	0.24%
Industrial Zone	47.77	0.63%
Mix Use Zone	55.97	0.73%
Public Buildings Zone	20.44	0.27%
Recreational Zone	90.64	1.19%
Residential Zone	695.26	9.13%
Urban Farm Land	3695.96	48.52%
Grand Total	7617.71	100%

The draft land use plan for Paharpur urban center shows a major shift toward organized development aligned with observed landuse percentages mentioned in NRM on Planning and Infrastructure Standards. Residential land is significantly expanded, now accounting for 14% of the total area to meet the growing housing demand. Commercial land use also rises to 1%, falling in the observed landuse percentage of 0.5-5% highlighting a strong focus on economic activity. Recreational and institutional uses of education, health and public buildings are introduced modestly, supporting livability and social services. The proposed zoning is shown below in **Map** followed by **Table** showing area statement of existing and proposed statistics of Paharpur urban center.



Map 3-3: Proposed Zones of Paharpur Urban Center

Table 3-6: Paharpur Urban Center Area Statement of Existing and Proposed Land Uses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of Existing & Proposed	Landuse Percent ages	NRM Percentages for Reference
Residential	Residential	509.37	Residential	695.26	1204.63	14%	24 - 50%
	Residential and Commercial (Mixed Use)	6.01	Mixed Use (Residential)	22.39	28.40		
	Total	515.38	Total	717.65	1233.03		
Commercial	Commercial	18.94	CBD	6.33	47.65	1%	0.5 - 5%
			Mixed Use (Commercial)	22.39			
	Total	18.94	Total	28.71			
Institutional	Education	11.43	Educational	18.35	77.55	1%	2-21%
	Health Facility	1.79	Health	18.33			
	Public Buildings and Civic Amenities	3.63	Public Buildings	20.44			
	Religious Building	3.59					
	Total	20.44	Total	57.11			
Industrial	Scattered Industry	12.64	Industrial	47.77	60.41	1%	2-20%
	Total	12.64	Total	47.77			
Recreational/ Open Space	Recreation	6.96	Recreational Zone	90.64	97.59	1%	0.5-7 %
	Total	6.96	Total	90.64			
Arterial Circulation/Terminals	Transportation	147.93	Bus Terminal	1.62	149.56	2%	2-29%
	Total	147.93	Total	1.62			
Other Uses	Agriculture	4348.56	Agriculture	2239.01	7343.3	82%	-
	Barren Land	2867.73	Barren land	721.91			
	Graveyard	32.58	Buffer Zone	6.12			
	Orchards	475.55	Mixed Use (Public Amenities)	11.19			
	Plantation	42.93	Urban Farmland	3695.96			
	Range Land	214.22					
	Vacant Area	187.20					
	Water Bodies	118.04					
	Total	8286.80	Total	6674.21			
Grand Total	9009.1	Grand Total	7617.7	9009.1	100%		

3.3.3 Paroa

The proposed land use plan of Paroa urban center spans a total area of 11551.22 hectares. The largest share is allocated to the Agriculture Zone, covering 7333.05 hectares (63.48%), which reflects the area's agricultural predominance and the planning emphasis on preserving fertile land. Urban farmland follows with 3147.59 hectares (27.25%) of land occupation.

Among built up land use, residential covers 720.31 hectares (6.24%) coupled with a Mix Use zone of 52.43 hectares (0.45%). Other significant allocations include the Health Zone (15.26 ha; 0.13%), Public Buildings Zone (11.13 ha; 0.10%), and Educational Zone (14.01 ha; 0.12%), ensuring adequate provision for social infrastructure.

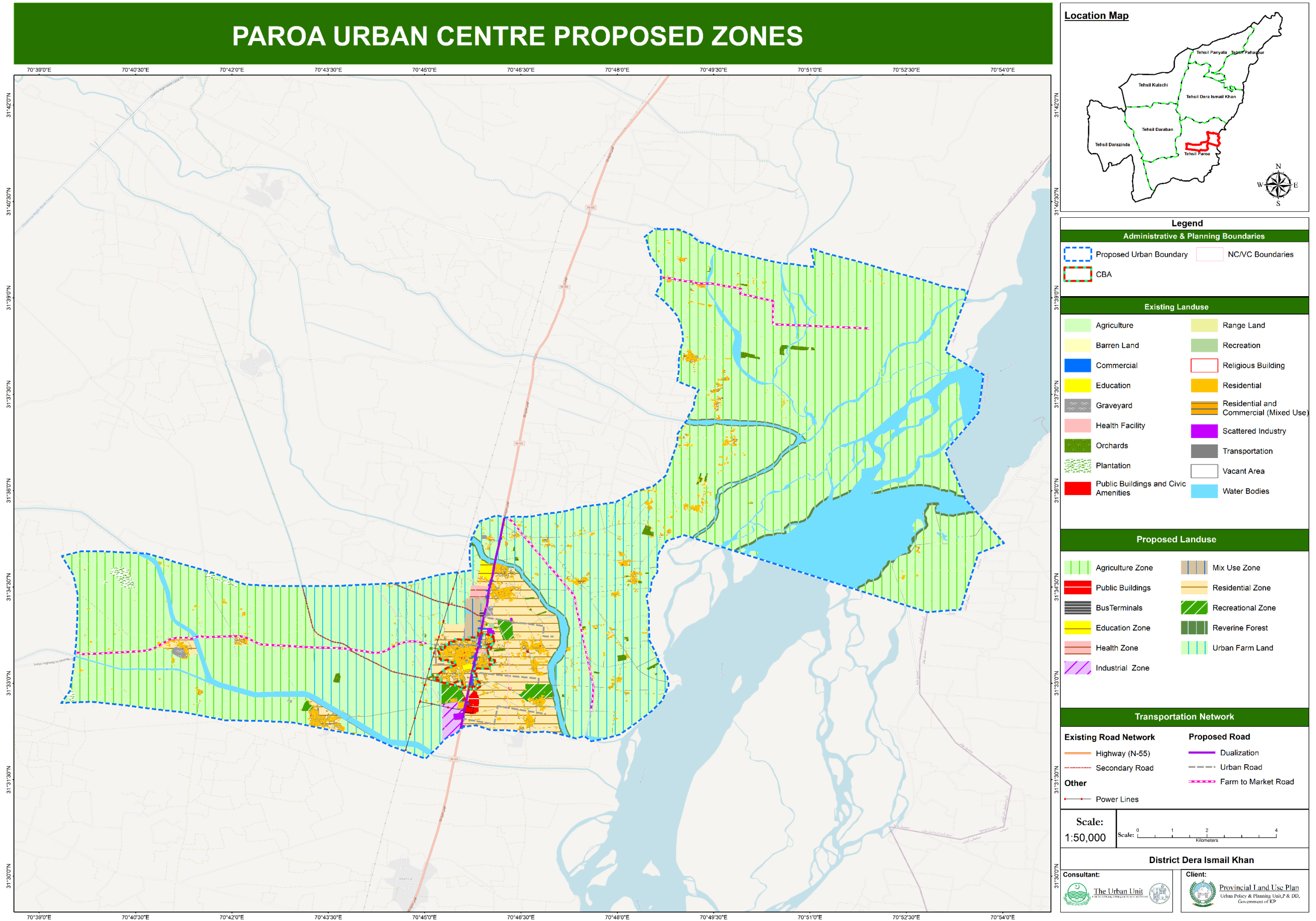
The Industrial Zone (38.71 ha; 0.34%) and Recreation (70.61 ha; 0.61%) are designated to support local economy and adequate green space for the locals respectively. Overall, the proposed land use distribution maintains a balanced approach, emphasizing agricultural preservation while ensuring adequate land allocation for residential, institutional, commercial, and industrial development to support sustainable urban growth.

Table 3-7: Paroa Urban Center Proposed Zones Area

Proposed Zones	Sum of Area (hectares)	Percentage
Agriculture Zone	7333.05	63.48%
Bus Terminal	1.62	0.01%
Education Zone	14.01	0.12%
Health Zone	15.26	0.13%
Industrial Zone	38.71	0.34%
Mix Use Zone	52.43	0.45%
Public Buildings Zone	11.83	0.10%
Recreation Zone	70.61	0.61%
Residential Zone	720.31	6.24%
Riverine Forest	145.80	1.26%
Urban Farmland	3147.59	27.25%
Grand Total	11551.22	100%

The draft land use plan for Paroa urban center shows a major restructuring to meet NRM standards and support organized growth. The urban boundary which is very extensive covering approximately 13824 hectares is the reason behind each land use category to fall well below the observed percentage in the NRM of Planning and Infrastructure standards. Residential land use accounts to 8% followed by Commercial, Industrial and Institutional allocations, at 0.2%, 0.3% and 0.4% respectively supporting employment and public service needs. Recreation allocation at 0.7% is the only category that falls within the observed range of 0.5-7%.

The proposed zoning is shown below in **Map** followed by **Table** showing area statement of existing and proposed statistics of Paroa urban center.



Map 3-4: Proposed Zones of Paroa Urban Center

Table 3-8: Paroa Urban Center Area Statement of Existing and Proposed Land Uses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of Existing & Proposed	Landuse Percentages	NRM Percentages for Reference
Residential	Residential	390.09	Residential	720.31	1110.40	8%	24 - 50%
	Residential and Commercial (Mixed Use)	1.71	Residential and Commercial (Mixed Use)	20.97	22.68		
	Total	391.80	Total	741.28	1133.08		
Commercial	Commercial	13.50	Mix Use (Commercial)	20.97	34.47	0.2%	0.5 - 5%
	Total	13.50	Total	20.97			
Institutional	Education	10.79	Education	14.01	60.42	0.4%	2-21%
	Health Facility	1.76	Health	15.26			
	Public Buildings and Civic Amenities	5.56	Public Buildings	11.83			
	Religious Building	1.19					
	Total	19.31	Total	41.11			
Industrial	Scattered Industry	8.61	Industrial	38.71	47.32	0.3%	2-20%
	Total	8.61	Total	38.71			
Recreational/ Open Space	Recreation	5.68	Recreation	70.61	76.29	0.6%	0.5-7 %
	Total	5.68	Total	70.61			
Arterial Circulation/Terminals	Transportation	147.97	Bus Terminal	1.62	149.59	1%	2-29%
	Total	147.97	Total	1.62			
Other Uses	Agriculture	11041.21	Agriculture	7333.05	12322.6	89%	-
	Barren land	245.34	Mix Use (Public Amenities)	10.49			
	Graveyard	16.67	Riverine Forest	145.80			
	Orchards	50.98	Urban Farmland	3147.59			
	Plantation	36.10					
	Range Land	142.60					
	Vacant Area	122.08					
	Water Bodies	1581.97					
Total	13236.94	Total	10636.92				
Grand Total	13823.8	Grand Total	11551.2	13823.8	100%		

3.3.4 Kulachi

The proposed land use plan 2045 for Kulachi urban center covers a total of 4248.77 hectares. The Agriculture Zone dominates, occupying 2871.8 hectares (67.59%) followed by urban farmlands with 774.54 hectares (18.23%) zone reflecting the area's strong agricultural base and the planning intent to conserve fertile land. Rangeland covers 306.69 hectares (7.22%) to support the agricultural base of the Kulachi urban center.

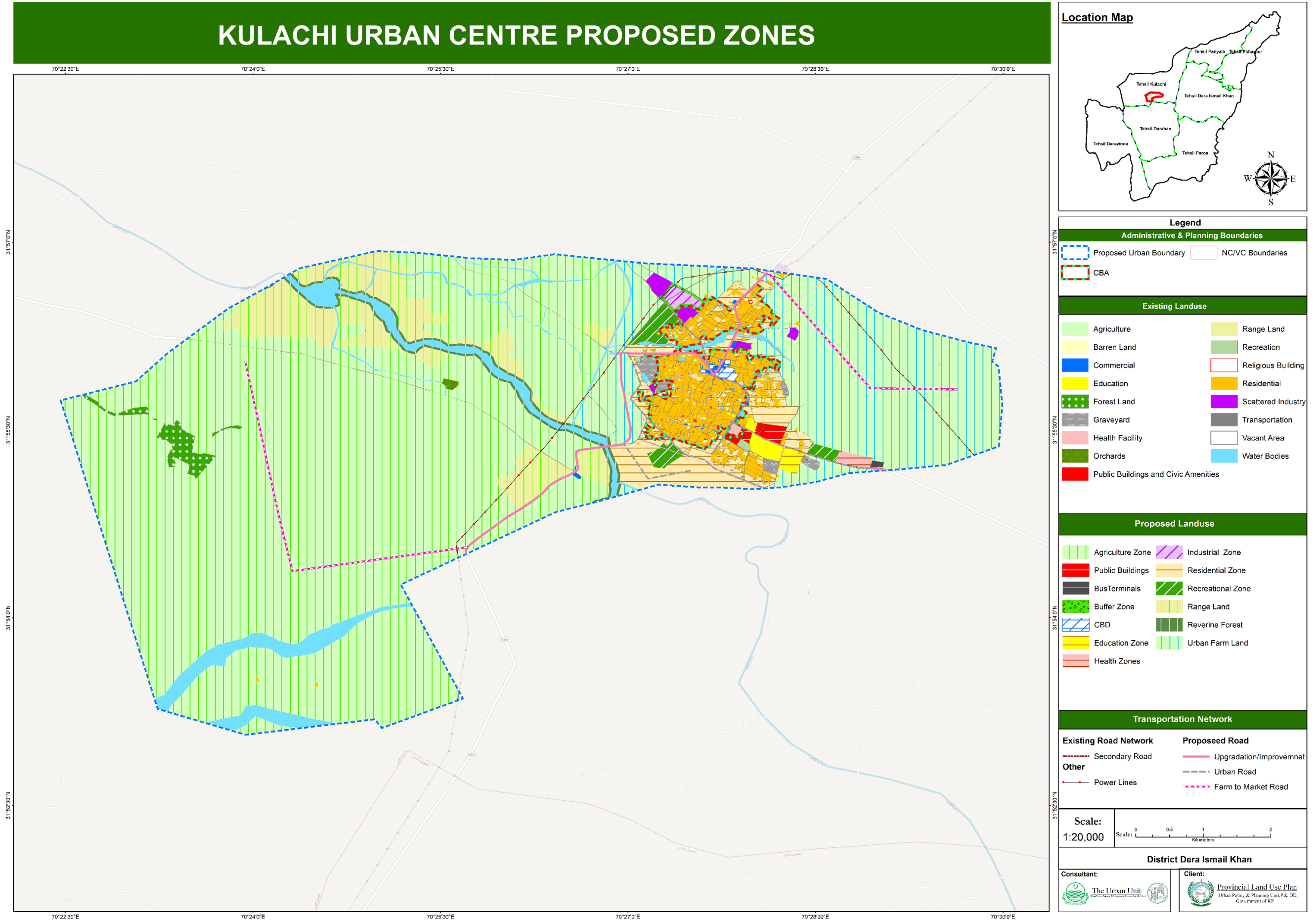
The Residential Zone covers 178.76 hectares (4.21%), allocated to accommodate existing and future housing demands. Other major land uses include the Recreational Zone (33.29 ha; 0.78%), Public buildings (8.55 ha; 0.20%), Health Zone (7.83 ha; 0.18%), Industrial Zone (7.97 ha; 0.19%), and Educational Zone (8.36 ha; 0.20%), ensuring provision for essential social, economic, and community facilities. The Central Business District (CBD) spans 5.95 hectares (0.14%), designated for commercial and business activities.

Overall, the proposed land use distribution promotes balanced and sustainable development, prioritizing agricultural preservation while allocating sufficient land for residential, institutional, industrial, and recreational uses to meet future urban growth needs.

Table 3-9: Kulachi Urban Center Proposed Zones Area

Proposed Zones	Sum of Area (hectares)	Percentage
Agriculture Zone	2871.80	67.59%
Buffer Zone	4.44	0.10%
Bus Terminal	1.63	0.04%
CBD	5.95	0.14%
Educational Zone	8.36	0.20%
Health Zone	7.83	0.18%
Industrial Zone	7.97	0.19%
Public Buildings	8.55	0.20%
Range Land	306.69	7.22%
Recreational Zone	33.29	0.78%
Residential Zone	178.76	4.21%
Riverine Forest	38.96	0.92%
Urban Farm Land	774.54	18.23%
Grand Total	4248.77	100%

The draft land use plan for Kulachi urban center shows a major shift toward organized development aligned with observed landuse percentages mentioned in NRM on Planning and Infrastructure Standards. Residential land is significantly expanded, now accounting for 8% of the total area to meet the growing housing demand. Commercial land use also rises to 0.2%, falling short in the observed landuse percentage of 0.5-5% due to extensive boundary but highlighting a strong focus on economic activity. Recreational landuse accounts for 1% well between the observed range of 0.5-7%. In addition to this, institutional uses of education, health and public buildings are introduced modestly, supporting livability and social services. The proposed zoning is shown below in **Map** followed by **Table** showing area statement of existing and proposed statistics of Kulachi urban center.



Map 3-5: Proposed Zones of Kulachi Urban Center

Table 3-10: Kulachi Urban Center Area Statement of Existing and Proposed Land Uses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of Existing & Proposed	Landuse Percentages	NRM Percentages for Reference
Residential	Residential	196.06	Residential	178.76	374.83	8%	24 - 50%
	Total	196.06	Total	178.76			
Commercial	Commercial	4.40	CBD	5.95	10.35	0.2%	0.5 - 5%
	Total	4.40	Total	5.95			
Institutional	Education	15.74	Educational	8.36	47.97	1%	2-21%
	Health Facility	2.28	Health	7.83			
	Public Buildings and Civic Amenities	3.30	Public Buildings	8.55			
	Religious Building	1.90					
	Total	23.22	Total	24.74			
Industrial	Scattered Industry	15.64	Industrial	7.97	23.61	0.5%	2-20%
	Total	15.64	Total	7.97			
Recreational/ Open Space	Recreation	2.49	Recreational	33.29	35.79	1%	0.5-7 %
	Total	2.49	Total	33.29			
Arterial Circulation/Terminals	Transportation	54.91	Bus Terminal	1.63	56.53	1%	2-29%
	Total	54.91	Total	1.63			
Other Uses	Agriculture	3669.25	Agriculture	2871.80	4244.48	89%	-
	Barren Land	0.11	Buffer Zone	4.44			
	Orchards	2.40	Rangeland	306.69			
	Graveyard	17.85	Riverine Forest	38.96			
	Forest Land	33.18	Urban Farmland	774.54			
	Range Land	505.02					
	Vacant Area	74.40					
	Water Bodies	194.62					
	Total	4496.82	Total	3996.42			
Grand Total	4793.5	Grand Total	4249	4793.5	100%		

3.3.5 Panyala

The proposed land use plan for Panyala urban center covers a total area of **767.59** hectares, carefully distributed among various planning classes to ensure balanced and sustainable urban development.

The Urban Farmland occupies the largest share, covering 281.39 hectares (36.66%), reflecting the area's predominantly agricultural character and the need to preserve fertile land for cultivation with rangeland occupying 110.21 hectares (14.36%) supporting the agriculture base of the area.

The residential zone accounts for 278.28 hectares (36.25%), providing adequate space for housing to accommodate the projected population growth. The Central Business District (CBD) covers 5.11 hectares (0.67%), designated for commercial and business activities to support the local economy.

Essential social infrastructure has also been planned, including the Educational Zone (7.76 hectares, 1.01%), Health Zone (10.34 hectares, 1.35%), and Public Buildings Zone (10.38 hectares, 1.35%), ensuring accessibility to education, healthcare, and administrative facilities.

In addition, 30.04 hectares (3.91%) have been allocated for Recreational Zones to promote community well-being and environmental balance. The Industrial Zone covers 8.10 hectares (1.05%), intended for small-scale industries to generate employment opportunities within the urban area.

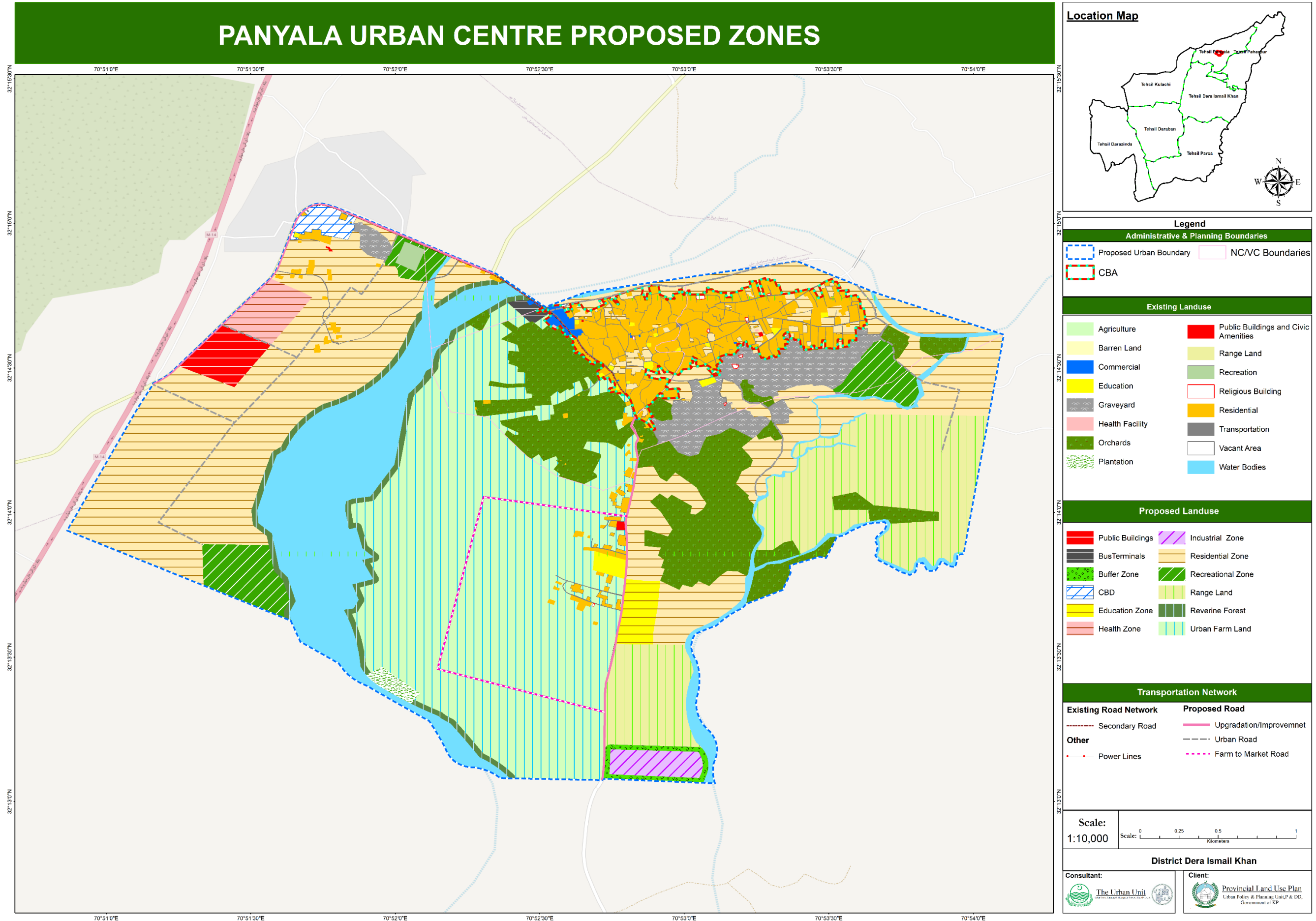
Table 3-11: Panyala Urban Center Proposed Zones Area

Proposed Zone	Sum of Area (hectares)	Percentage
Buffer Zone	4.27	0.56%
Bus Terminal	1.63	0.21%
CBD	5.11	0.67%
Educational Zone	7.76	1.01%
Health Zone	10.34	1.35%
Industrial Zone	8.10	1.05%
Public Buildings	10.38	1.35%
Range Land	110.21	14.36%
Recreational Zone	30.04	3.91%
Residential Zone	278.28	36.25%
Riverine Forest	20.09	2.62%
Urban Farm Land	281.39	36.66%
Grand Total	767.59	100%

The draft land use plan for Panyala urban center shows a major restructuring to meet observed range of landuse coverage in the NRM of Planning and Infrastructure standards to support organized growth. Residential land use rises to 31%, which is in between observed 24–50% range, indicating a strong focus on housing provision but necessitating future control over urban density.

Commercial and institutional allocations, at 0.5% and 3% respectively, fall well within NRM percentages, supporting employment and public service needs. Recreational spaces, at 3%, align well with livability goals.

The proposed zoning is shown below in **Map** followed by **Table** showing area statement of existing and proposed statistics of Panyala urban center.



Map 3-6: Proposed Zones of Panyala Urban Center

Table 3-12: Panyala Urban Center Area Statement of Existing and Proposed Land Uses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of Existing & Proposed	Landuse Percentages	NRM Percentages for Reference
Residential	Residential	64.67	Residential	278.28	342.95	31%	24 - 50%
	Total	64.67	Total	278.28			
Commercial	Commercial	2.22	CBD	5.11	7.33	1%	0.5 - 5%
	Total	2.22	Total	5.11			
Institutional	Education	3.74	Educational	7.76	33.07	3%	2-21%
	Health Facility	0.09	Health	10.34			
	Public Buildings and Civic Amenities	0.39					
	Religious Building	0.38	Public Buildings	10.38			
	Total	4.59	Total	28.48			
Industrial	-		Industrial	8.10	8.10	1%	2-20%
			Total	8.10			
Recreational/ Open Space	Recreation	1.81	Recreation	30.04	31.86	3%	0.5-7 %
	Total	1.81	Total	30.04			
Arterial Circulation/Terminals	Transportation	13.72	Bus Terminal	1.63	15.34	1%	2-29%
	Total	13.72	Total	1.63			
Other Uses	Agriculture	229.14	Buffer Zone	4.27	684.90	61%	-
	Barren Land	19.30	Rangeland	110.21			
	Graveyard	37.88	Riverine Forest	20.09			
	Orchards	107.15	Urban Farmland	281.39			
	Plantation	2.79					
	Range Land	499.39					
	Vacant Area	19.61					
	Water Bodies	121.12					
Total	1036.38	Total	415.96				
Grand Total	1123.4	Grand Total	766	1123.5	100%		

3.3.6 Daraban

The proposed land use plan of Daraban urban center spans a total area of 21365.17 hectares, designed to promote organized urban growth while preserving the area's agricultural and environmental assets. The Urban farmland occupies the largest share, covering 6581.94 hectares (30.81%) closely followed by agriculture zone with 6267.19 hectares (29.33%) of the total proposed zones reflecting the area's agrarian base and the importance of maintaining agricultural productivity. Rangeland accounts for 6183.62 hectares (28.94%) indicating the support for agriculture base.

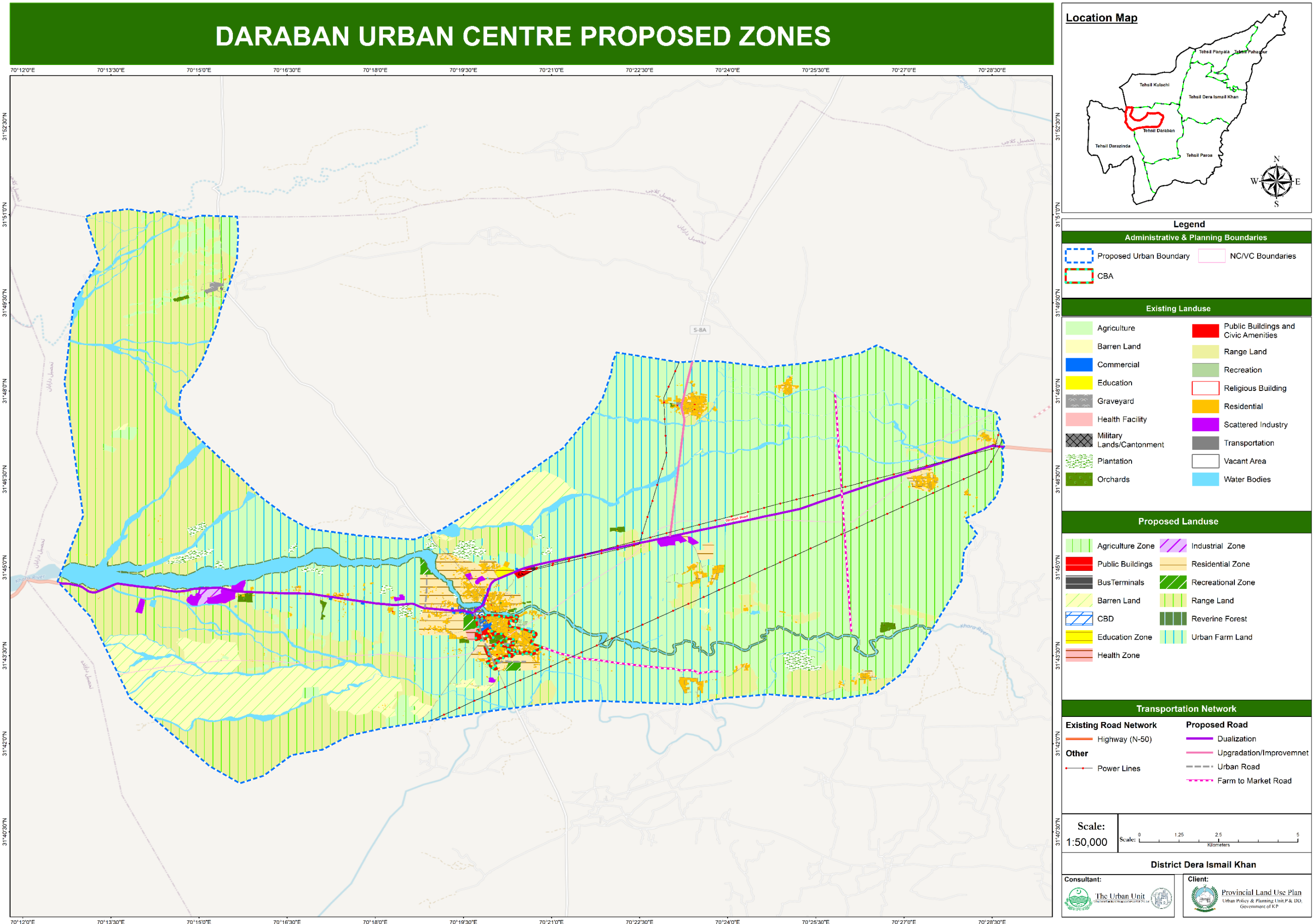
The residential zone comprising 453.32 hectares (2.12%) provides adequate space to meet current and future housing needs of the growing population. The Central Business District (CBD) covers 8.90 hectares (0.04%), planned as the commercial core to accommodate markets, shops, and business activities, thereby supporting local economic development. Social infrastructure has been prioritized through the allocation of 8.75 hectares (0.04%) for Educational Zones, 10.5 hectares (0.05%) for Health Facilities, and 5.67 hectares (0.03%) for Public Buildings, ensuring accessibility to essential services for residents.

To support economic activity, 19.03 hectares (0.09%) have been proposed for the Industrial Zone, encouraging small scale industries that can provide local employment opportunities. Additionally, 180.08 hectares (0.85%) is allocated for riverine forest along water bodies, contributing to environmental sustainability and green cover, while 34.46 hectares (0.16%) are proposed for recreational purpose to promote social interaction and community well-being.

Table 3-13: Daraban Urban Center Proposed Zones Area

Proposed Zones	Area (ha)	Percentage
Agriculture Zone	6267.19	29.33%
Barren Land	1608.10	7.53%
Bus Terminal	1.62	0.01%
CBD	8.90	0.04%
Educational Zone	8.75	0.04%
Health Zone	10.50	0.05%
Industrial Zone	19.03	0.09%
Public Buildings	5.67	0.03%
Range Land	6183.62	28.94%
Recreational Zone	34.46	0.16%
Residential Zone	453.32	2.12%
Riverine Forest	182.08	0.85%
Urban Farm Land	6581.94	30.81%
Grand Total	21365.17	100%

The draft land use plan for Daraban urban center shows a major restructuring to meet NRM standards and support organized growth. The urban boundary which is very extensive covering approximately 23396 hectares is the reason behind each landuse category to fall well below the observed percentage in the NRM of Planning and Infrastructure standards. Residential land use accounts to 3.6% followed by Commercial, Industrial and Institutional allocations, at 0.1%, 0.4% and 0.2% respectively supporting employment and public service needs. The proposed zoning is shown below in **Map** followed by **Table** showing area statement of existing and proposed statistics of Daraban urban center.



Map 3-7: Proposed Zones of Daraban Urban Center

Table 3-14: Daraban Urban Center Area Statement of Existing and Proposed Land Uses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of Existing & Proposed	Landuse Percentages	NRM Percentages for Reference
Residential	Residential	381.90	Residential	453.32	835.22	3.6%	24 - 50%
	Total	381.90	Total	453.32	835.22		
Commercial	Commercial	23.21	CBD	8.90	32.11	0.1%	0.5 - 5%
	Total	23.21	Total	8.90			
Institutional	Education	6.90	Educational	8.75	44.52	0.2%	2-21%
	Health Facility	0.76	Health	10.50			
	Public Buildings and Civic Amenities	11.11	Public Buildings	5.67			
	Religious Building	0.84					
	Total	19.61	Total	24.91			
Industrial	Scattered Industry	85.64	Industrial	19.03	104.67	0.4%	2-20%
	Total	85.64	Total	19.03			
Recreational/ Open Space	Recreation	3.27	Recreation	34.46	37.74	0.2%	0.5-7 %
	Total	3.27	Total	34.46			
Arterial Circulation/Terminals	Transportation	105.61	Bus Terminal	1.62	107.23	0.5%	2-29%
	Total	105.61	Total	1.62			
Other Uses	Agriculture	12145.18	Agriculture	6267.19	22234.31	95%	-
	Barren Land	2018.91	Barren Land	1608.10			
	Graveyard	12.01	Rangeland	6183.62			
	Military Lands/Cantonment	0.98	Riverine Forest	182.08			
	Orchards	54.20	Urban Farmland	6581.94			
	Plantation	167.45					
	Range Land	6956.97					
	Vacant Area	244.10					
	Water Bodies	1176.75					
	Total	22776.54	Total	20822.92			
Grand Total	23395.8	Grand Total	21363.5	23395.8	100%		

3.3.7 Darazinda

The proposed land use plan for Darazinda urban center covers 8202.88 hectares, ensuring a balanced and sustainable urban structure. Rangeland dominates with 4191.16 hectares (51.1%), while Barren land occupies 3587.15 hectares (43.73%). Agriculture zone accounts for only 163.03 hectares (1.99%) of total area showing reduced agriculture activity in the urban center.

The residential zone covers 179.52 hectares (2.19%), providing adequate space for housing needs. The CBD (4.59 ha, 0.06%) serves as the commercial hub, while Educational (5.49 ha, 0.07%), Health (8.95 ha, 0.11%), and Public Buildings (8.68 ha, 0.11%) ensure access to essential services.

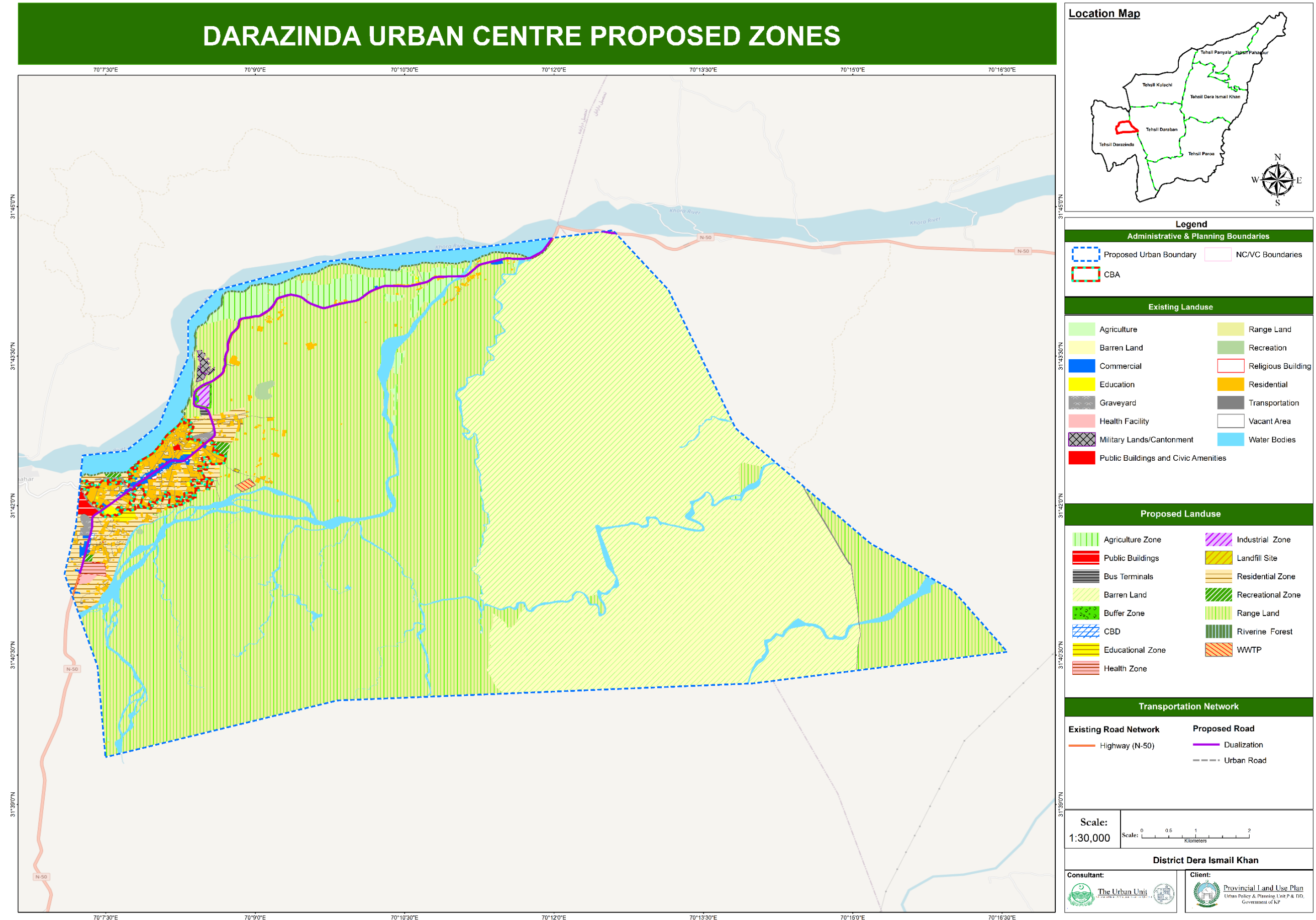
The Industrial Zone (6.58 ha, 0.08%) supports local employment, and recreational zones (9.49 ha, 0.12%) enhance community well-being. The Riverine Forest (28.23 ha, 0.34%) contributes to environmental protection, and a small Buffer Zone (3.89 ha, 0.05%) maintains land-use separation.

Overall, the plan promotes sustainable growth by integrating agriculture, residential development, industry, and environmental conservation.

Table 3-15: Darazinda Urban Center Proposed Zones Area

Proposed Zones	Area (ha)	Percentage
Agriculture Zone	163.03	1.99%
Barren Land	3587.15	43.73%
Buffer Zone	3.89	0.05%
Bus Terminal	1.63	0.02%
CBD	4.59	0.06%
Educational Zone	5.49	0.07%
Health Zone	8.95	0.11%
Industrial Zone	6.58	0.08%
Landfill Site	0.42	0.01%
Public Buildings	8.68	0.11%
Range Land	4191.16	51.09%
Recreational Zone	9.49	0.12%
Residential Zone	179.52	2.19%
Riverine Forest	28.23	0.34%
WWTP	4.06	0.05%
Grand Total	8202.88	100%

The draft land use plan for Darazinda urban center shows a major restructuring to meet NRM standards and support organized growth. The urban boundary which is very extensive covering approximately 8914 hectares is the reason behind each landuse category to fall well below the observed percentage in the NRM of Planning and Infrastructure standards. Residential land use accounts to 3.7% followed by Commercial, Industrial and Institutional allocations, at 0.3%, 0.1% and 0.4% respectively supporting employment and public service needs. The proposed zoning is shown below in **Map** followed by **Table** showing area statement of existing and proposed statistics of Darazinda urban center.



Map 3-8: Proposed Zones of Darazinda Urban Center

Table 3-16: Darazinda Urban Center Area Statement of Existing and Proposed Landuses

Landuse Class	Existing	Area (hectares)	Proposed	Area (hectares)	Sum of Existing & Proposed	Landuse Percentages	NRM Percentages for Reference
Residential	Residential	147.73	Residential	179.52	327.25	3.7%	24 - 50%
	Total	147.73	Total	179.52	327.25		
Commercial	Commercial	18.78	CBD	4.59	23.37	0.3%	0.5 - 5%
	Total	18.78	Total	4.59			
Institutional	Education	7.74	Educational	5.49	36.34	0.4%	2-21%
	Health Facility	3.99	Health	8.95			
	Public Buildings and Civic Amenities	0.89	Public Buildings	8.68			
	Religious Building	0.60					
	Total	13.23	Total	23.11			
Industrial	-	-	Industrial	6.58	6.58	0.1%	2-20%
			Total	6.58			
Recreational/ Open Space	Recreation	8.72	Recreation	9.49	18.21	0.2%	0.5-7 %
	Total	8.72	Total	9.49			
Arterial Circulation/Terminals	Transportation	38.33	Bus Terminal	1.63	39.96	0.4%	2-29%
	Total	38.33	Total	1.63			
Other Uses	Agriculture	173.82	Agriculture	163.03	8462.47	95%	-
	Barren Land	3601.12	Barren land	3587.15			
	Graveyard	10.69	Buffer Zone	3.89			
	Military Lands/Cantonment	8.24	Landfill Site	0.42			
	Range Land	4391.38	Rangeland	4191.16			
	Vacant Area	36.54	Riverine Forest	28.23			
	Water Bodies	465.57	WWTP	4.06			
	Total	8687.36	Total	7977.96			
Grand Total	8914.2	Grand Total	8202.9	8914.2	100%		

3.4 Comparative Review of D.I. Khan City Master Plan (2024–2042) and District Land Use Plan

The D.I. Khan City Master Plan (2024–2042) is an initiative of the Urban Policy and Planning Unit, Government of Khyber Pakhtunkhwa. It is currently under preparation, and the final version has not yet been published. The present analysis is based on the latest available document titled Task-C: Strategic Scenario Development Report of D.I. Khan City, submitted in January 2024, which forms a key part of the master planning process.

It is important to note that while the master plan is focused exclusively on D.I. Khan City, the District Land Use Plan prepared in this document covers the entire D.I. Khan District, including multiple urban and rural areas. To ensure consistency in spatial planning and zoning logic, the available master plan has been critically reviewed and compared with the proposed district-level land use plan.

3.4.1 Urban Growth Direction and Boundary Delineation

The master plan outlines three development scenarios, one of which is selected as the preferred option. This preferred scenario of existing expansion emphasizes urban expansion towards all direction except East which is restricted by the Indus River, which is similarly adopted in the District Land Use Plan. This consistency strengthens the alignment between both planning efforts.

The proposed urban boundary in both documents is largely similar, with only minor variations. For instance, on the Northern side, the land use plan includes more built-up part of VC Kokar, which the master plan includes which omission of the built-up part beyond D I Khan-Mianwali Road. Similarly, the land use boundary had included more VC Himmat as compared to the master plan boundary.

Towards the West and Northwest, the land use boundary includes entire VC's of Ratta Kulachi-II and Korai whereas the master plan had excluded some portion of the VC's.

In the Southern side, the master plan boundary is limited till the D.I. Khan-Bhakkar Road leaving some portion of the VC Kachi Paind Khan whereas the land use boundary considers the VC boundary entirely in the South.

3.4.2 Residential Zones

The master plan divides residential areas into subcategories: infill housing, low-income housing, new housing, and Model Villages 1, 2, and 3. The land use plan consolidates these under a unified residential zone, yet the locational logic is consistent.

- **Model Village:** The location of Model Environmental Village Shorkot is identical in both plans.
- **Infill Development:** The Western and Northern infill housing proposed in the master plan overlaps with residential zoning in the land use plan, though zone sizes differ based on updated requirements.
- **Low-income housing** and **new housing** are both proposed towards the East and North in the master plan and similarly zoned for residential use in the land use plan, with only slight differences in boundary alignment.

3.4.3 Agricultural Zones

The master plan introduces multiple categories under agriculture: agriculture zone, orchard reserve and urban farmland. The northwestern agriculture zone in the master plan is designated as agriculture zone in the land use plan too. The urban farmlands in the North and South near the Indus River of the master plan have been designated same in land use as urban farmland. One urban farmland zone between Arra Road and N-55 have been marked as residential zone in the land use due to the housing requirement of the population for the plan period.

3.4.4 Institutional Zones

The master has proposed a single institutional zone whereas the land use has proposed two new public buildings zone zoned strategically to meet the projected future demand for public and semi-public uses.

3.4.5 Recreational Zones

The master plan proposes three types of recreational zones: sports/recreational zone, river front water park, and a botanical garden. The land use plan retains the same locations, with minor area adjustments.

- The river front water park South is retained in both plans at the same location.
- The single recreation zone in the master plan is located near to the river front water park whereas the land use plan has proposed two recreation zones away from the river front water park at location where majority residential activity will take place.

3.4.6 Commercial Zones

The Central Business District (CBD) proposed in the West side is situated on Daraban Road in the land use plan whereas in the master plan it has been proposed on N-50 where the consultant in the land use plan has proposed a mix use zone.

A second CBD zone has been proposed towards the North in the master plan on Bannu Road whereas it has been proposed in the near vicinity on Paharpur road in the land use plan. The land use plan has proposed a CBD in the center of the city opposite to the Military lands/Cantonment area on Tank-D.I. Khan Road.

Other than these, the master plan has proposed a Regeneration of Trade and Business Zone whereas the land use plan has proposed a smaller CBD on D.I. Khan-Kulachi Road junction with the N-55 among other proposed zones of Industrial and Institutional zones.

3.4.7 Industrial Zone

Both plans identify the industrial zone with master plan proposing it on Daraban Road while land use proposing it on Tank-DI Khan-N-55 junction where the presence of existing scattered industries is abundant. Moreover, the location has been kept at a distance from the existing Small Industrial Estate of D.I. Khan which is located on same road.

3.4.8 Mixed-Use Zones

Mixed-use zoning is proposed along the D.I. Khan-Bhakkar Road starting from N-55 junction in the land use plan till a secondary road moving towards the North. In master plan, the mix use corridor has been proposed from this secondary road junction till the Indus River.

The land use has proposed 300 sq. ft of mix use along N-55 and N-50 highways and 200 sq. ft along other all other major roads. Along with this, three separate mix use zones have been proposed in the land use at key junctions.

3.4.9 Conclusion

The comparison reveals a strong alignment between the D.I. Khan City Master Plan (2024–2042) and the District Land Use Plan, particularly in terms of spatial growth direction and overall development strategy with both emphasizing all directional growth apart from eastward.

While minor differences exist, mainly due to the broader geographic scope and district-level considerations, they do not alter the core vision. The District Land Use Plan builds upon the foundation of the master plan to provide a more comprehensive and adaptable framework for guiding long-term development across D.I. Khan District

4. Legal Framework for Implementation of District Land Use Plans

A District Land Use Plan (DLUP) can only function effectively when supported by a well-defined legal and institutional framework. Such a framework ensures clarity regarding the roles and responsibilities of different actors, the standards to be applied, the procedures for obtaining planning permissions, and the consequences of non-compliance. Without this clarity, land use plans remain abstract documents with limited impact on actual development and regulation.

Within KP, DLUP are operationalized through various acts and regulations which include but not limited to the KP Land Use and Building Control Act, 2021, KP Local Government Act, 2013 (amended 2022), which defined administrative set up for its operationalization. Followed by Khyber Pakhtunkhwa Building Control Regulations 2024, Housing Schemes Regulations 2024, which directly enforce DLUP requirements at scheme and building levels. Following section details out the administrative and legal framework of the DLUP with implementation strategy for improvement.

4.1 Administrative and Institutional Framework

The governance and execution of the District Land Use Plan (DLUP) in Khyber Pakhtunkhwa (KP) is anchored in a **three-tier institutional structure** created under the **KP Land Use and Building Control Act, 2021**, supported by the **KP Local Government Act, 2013 (amended 2022)** and sectoral development regulations. The framework establishes a clear chain of responsibility spanning from the provincial policy-making level down to the local enforcement and service delivery level.

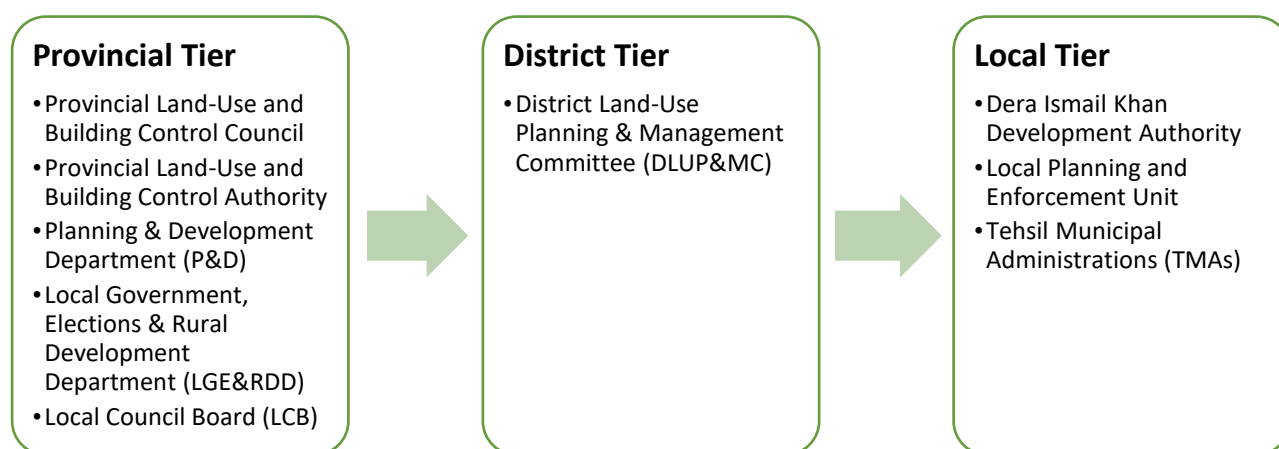


Figure 4-1: Administrative Setup of KP for DLUP Implementation

4.1.1 Provincial Tier - Policy and Regulatory Leadership

4.1.1.1 Provincial Land-Use and Building Control Council

The Khyber Pakhtunkhwa Land-Use and Building Control Act, 2021 establishes the Provincial Land-Use and Building Control Council, a key body responsible for overseeing land-use and building regulations. The Council is chaired by the Chief Minister of Khyber Pakhtunkhwa, with the Minister for Local Government, Elections, and Rural Development serving as the Vice Chairperson. The Council's membership includes various provincial ministers—such as those for Agriculture, Industries, and Environment—as well as senior officials from the Planning and Development Department, the Board of Revenue, and other government departments. Additionally, the Council features five experts, with at least three from the private sector, who are nominated

by the Chairperson. The Director General (DG) of the Authority serves as Member-cum-Secretary. Co-opted experts may be invited without voting rights.

Mandate

- a) approve policies and guidelines pertaining to the functioning of the Authority;
- b) approve the urban policy, physical planning standards, land-use policy, guidance notes, etc. submitted to it by the Authority;
- c) approve regulations made under this Act;
- d) approve standards and guidelines for land use, zoning, and spatial planning;
- e) approve any strategic or master plans;
- f) approve district land-use plans, master plans, and any change or modification thereof;
- g) approve annual budgets of the Authority, both current and development, and honorarium for the expert members from the private sector, at clause (q) of sub-section (1) of section 3;
- h) create, abolish, and convert posts; fix salaries, allowances, and other perks and privileges for the officers and officials of the Authority;
- i) conduct oversight of the plan preparations and their implementation under this Act;
- j) give directions to the Authority, from time to time, for discharging its functions under this Act; and
- k) perform any other function as may be assigned to it by Government or as it may deem appropriate under this Act.

4.1.1.2 Provincial Land-Use and Building Control Authority

The Act also establishes the Provincial Land-Use and Building Control Authority as a corporate entity with perpetual succession, capable of managing property, entering into agreements, and engaging in legal actions. The Council serves as the Board of Directors for the Authority, which is headquartered in Peshawar with the option to open sub-offices across the province. The Authority's actions are authenticated by the Director General, who is supported by the Urban Planning Policy Unit of the Planning and Development Department.

Directorate General

Led by the DG, the Directorate General:

- a) propose physical planning standards. land-use. guidance noted etc. and recommend it to the Council for its consideration and approval;
- b) recommend to the Council amendments in regulations, bye laws. regulatory instruments etc. for its consideration and approval;
- c) ensure the development of master plans, strategic development plans. district land use plans, standards relating to building control or any other plans under this Act;
- d) ensure implementation of the master plans, land-use plans or any other plans;
- e) conduct, promote and coordinate research, in relation to different aspects of lands use, zoning and spatial planning and related matters;
- f) publish documents, reports, statistics, monographs and other publications, relating to town and country planning and their methodology;
- g) report to and advise the Council, upon matters in the conservation, use and development, classification and reclassification of land;
- h) supervise, control and oversee the functions of the District Land- Use Planning and Management Committees; and

Additional responsibilities include tracking compliance with rules and regulations, recommending action against underperformance, and carrying out any other duties delegated by the Council to strengthen governance and expedite execution of the Authority's mandate.

4.1.1.3 Planning and Development Department

The Planning and Development (P&D) Department of the Government of Khyber Pakhtunkhwa is the primary policy decision-making body in the field of development within the province. It holds a central role in the

implementation and monitoring of the province's overall development plans. The department's responsibilities encompass various critical functions, including policy-making, project appraisal, implementation monitoring, and evaluation.

In terms of policy making, the P&D Department is responsible for formulating provincial and sectoral policies, setting priorities for projects based on resource requirements. It undertakes strategic planning for the provincial economy, ensuring long-term growth and sustainable development. Regarding project appraisal and approval, the department appraises and processes development projects and schemes, ensuring they align with provincial priorities and available resources. It plays a vital role in the approval process, including the compilation of the Annual Development Plan (ADP), allocation of funds, and recommendations for project approvals.

The department also oversees implementation and monitoring by monitoring the release of funds and managing inter-sectoral re-appropriation to ensure efficient implementation of development projects. It conducts continuous monitoring and evaluation of development schemes, including socio-economic impact analysis, to assess the effectiveness and outcomes of projects. The P&D Department is responsible for formulating the Annual Development Plan, which outlines the development priorities and projects for the fiscal year. It manages provincial statistics, providing crucial data for informed decision-making and policy formulation.

In terms of foreign development assistance and coordination, the department coordinates foreign development assistance and manages relationships with international donors to secure funding and technical support for development projects. It processes and facilitates foreign training programs and visits for provincial officials to enhance their skills and knowledge. The P&D Department leads provincial representation in national development forums, ensuring that Khyber Pakhtunkhwa's interests are represented at the national level. It leads steering committees and project review boards (PRBs) for mega projects, providing strategic direction and oversight.

The department provides secretariat support to various key development bodies, including the Provincial Development Working Party (PDWP), Central Development Working Party (CDWP), Executive Committee of the National Economic Council (ECNEC), and the National Economic Council (NEC). Additionally, the P&D Department coordinates and implements the province's reforms agenda, ensuring continuous improvement in governance and development processes.

The Planning and Development Department of the Government of Khyber Pakhtunkhwa is instrumental in shaping the province's development trajectory. Through its comprehensive roles in policy-making, project appraisal, implementation monitoring, and evaluation, the department ensures the effective execution of development plans. Its leadership in coordinating foreign assistance, managing provincial statistics, and representing the province at national forums underscores its pivotal role in driving sustainable development and economic growth in Khyber Pakhtunkhwa.

4.1.1.4 Local Government, Elections and Rural Development Department

The Local Government, Elections, and Rural Development Department of Khyber Pakhtunkhwa is dedicated to meeting the specific needs of its citizens through local governance. The department implements the Khyber Pakhtunkhwa Local Government Act 2013 and its 2019 amendment, which were introduced by the provincial government to reform local governance. Along with implementation, the department is responsible for regulating and administrating to ensure that local governments within the province operate according to policy. The local government structure established under the 2013 Act includes City District Government, District Governments, Tehsil Municipal Administrations, Town Municipal Administrations, Village Councils, and Neighbourhood Councils.

The department's vision is to empower local governments to generate revenue and utilize development funds effectively to meet their administrative and infrastructural needs. This involves providing essential municipal services and infrastructure and aims to transform cities and towns into economic growth hubs, establish

efficient governance mechanisms, address jurisdictional issues, and enhance the capacity of local governments.

The department's objectives include promoting local government institutions as a fundamental principle, decentralizing government administration to expedite public service delivery, and devolving political, financial, and administrative authority to elected local representatives. Strategic interventions focus on increasing citizen participation, aligning government and development partner commitments, clarifying the local government system, and setting up systemic arrangements and resource allocations to strengthen local governance. The department also aims to facilitate the exchange of experiences and lessons learned to improve governance practices.

Guided by the principles of integrity, innovation, and initiative, the department upholds high standards in public service delivery, ensuring responsiveness, transparency, and accountability. Innovation drives the department to seek unique solutions to the evolving challenges posed by urbanization, technological changes, and demographic shifts. An initiative is fostered through a proactive culture, utilizing resources effectively and sustainably for the welfare of Khyber Pakhtunkhwa's citizens.

Figure 1-2 below shows the detailed organogram of the Local Government, Elections, and Rural Development Department, it shows all the sections and subsections of the department.

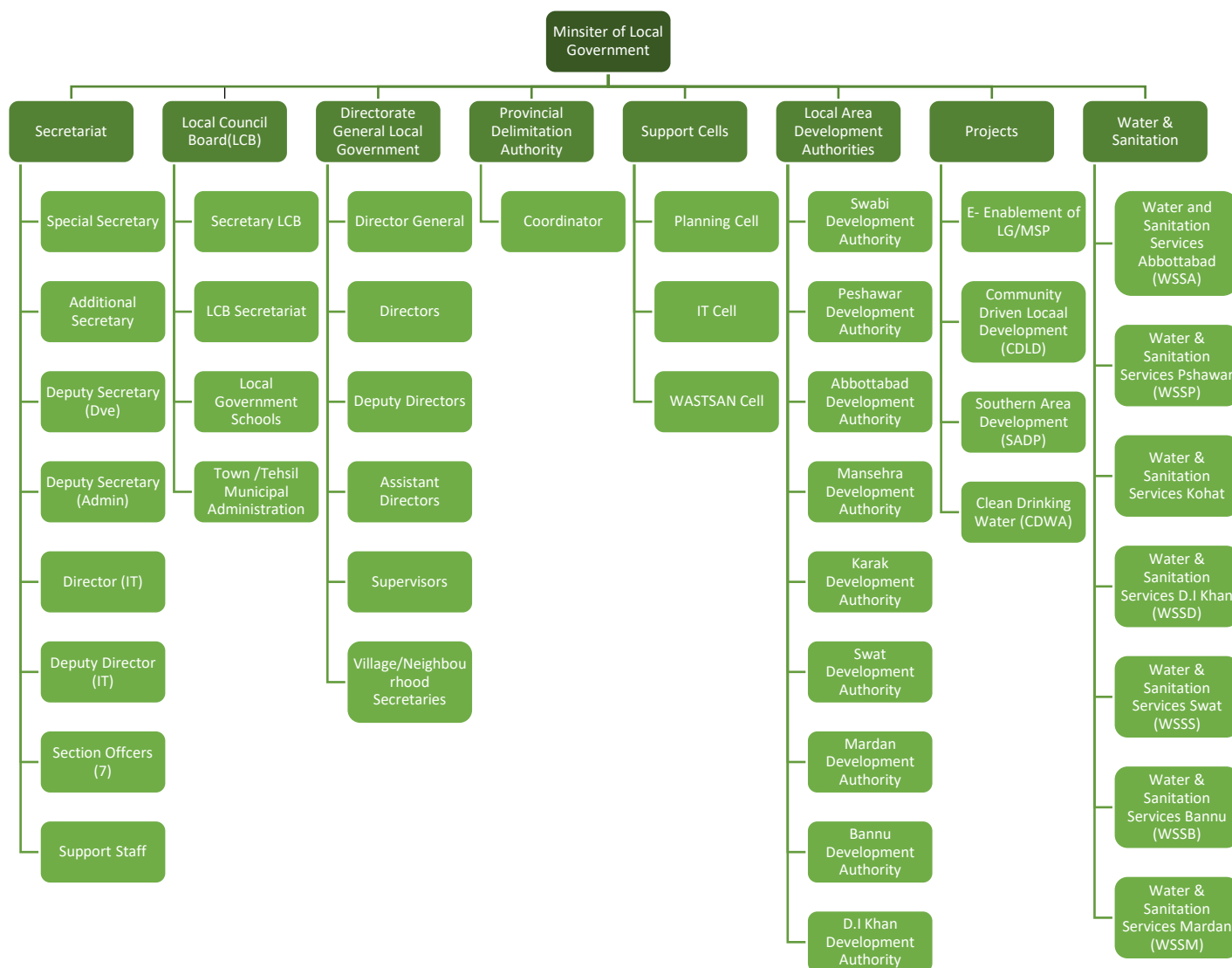


Figure 4-2: Local Government, Elections, and Rural Development Department Organogram

4.1.1.5 Local Council Board

The Local Council Board (LCB) is a semi-autonomous body established to manage all matters of the Tehsil Municipal Administration (TMA) in Khyber Pakhtunkhwa. Created under Section 46 of the NWFP Local Government Ordinance 1979, it has continued its functions with protections under the Local Government Ordinance 2001, Local Government Act 2012, and the Khyber Pakhtunkhwa Local Government Act 2013. The LCB is the successor of the defunct NWFP Local Government Board, originally established under the Basic Democracies Orders 1959 and the Municipal Administration Ordinance 1960.

The core function of the LCB is to manage various administrative services for personnel paid out of the Local Fund, including appointments, promotions, postings, transfers, and pensions. As an oversight and supervisory entity for the TMA, the LCB ensures effective service delivery in several key areas. These include zoning and master planning to regulate urban development, clean drinking water and sanitation services provision, and management of essential public safety services such as fire brigades.

Additionally, the LCB oversees the management of slaughterhouses, cattle fairs, and bus terminals, ensuring they operate efficiently and hygienically. It regulates building control to maintain construction standards and manages waste to ensure cleanliness in public areas. The Board also supervises the maintenance of food markets, fruit and vegetable markets, and trade licensing to facilitate orderly commerce. The LCB is

responsible for the upkeep of parks and open spaces, providing recreational facilities for the public, and works to prevent encroachments to maintain orderly urban environments.

Through these comprehensive functions, the Local Council Board plays a vital role in enhancing local governance and service delivery, ensuring that the Tehsil Municipal Administrations operate effectively and serve the needs of the citizens of Khyber Pakhtunkhwa.

4.1.2 District Tier – Plan Preparation, Coordination, and Enforcement

4.1.2.1 District Land-Use Planning and Management Committee

The District Land-Use Planning and Management Committees (DLUP&MC) are constituted as institutional mechanisms to oversee and guide land-use governance at the district level in accordance with statutory provisions. Each committee is chaired by the Deputy Commissioner and comprises key departmental heads and representatives from local councils, with the Additional Deputy Commissioner (Finance and Planning) serving as both a member and the Secretary.

The committees are mandated to convene on a monthly basis or as required, with a two-thirds quorum necessary for proceedings. Their core functions include the facilitation and supervision of land-use surveys, zoning activities, strategic and master planning, and coordination with local government bodies. They are also responsible for reviewing no-objection certificates (NOCs), development permissions, and recommending land-use plans to the relevant Authority for approval.

- (a) facilitate, coordinate and supervise conduct of surveys for the purpose of land uses and their zoning, master planning, strategic planning etc.;
- (b) consult with the concerned local government on formulation and implementation of the district land-use plan or master plan;
- (c) facilitate, coordinate and supervise formulation implementation of district land-use plans or master plan;
- (d) send recommendations to the Authority and seek its approval on a case-to-case basis;
- (e) monthly review of NOCs, issued by the concerned agencies, for land use and development permissions;
- (f) take any action that is necessary to undo a violation including demolition or reconstruction of a building;
- (g) stop a developer from development carried out in violation of the planning permission;
- (h) change in land use being undertaken in violation of land use permission or without land use permission;
- (i) receive and dispose of complaints under this Act;
- (j) compile statistics and reports on land use and submit the same to the Authority; and
- (k) perform any other duty or function as assigned by the Authority.

Additionally, the committees are empowered to take enforcement action against unauthorized developments and violations of approved land-use plans. The inclusion of co-opted members with technical expertise further strengthens the committee's capacity for informed decision-making. These provisions collectively promote a structured, accountable, and efficient approach to district-level land-use planning and management.

4.1.3 Local Planning Institutions – Implementation and Service Delivery

Local planning institutions play a critical role in the development, management, and sustainable growth of communities. They handle urban and regional planning, determining land use, and creating zoning regulations that dictate building types and activities in specific areas. Key responsibilities include ensuring affordable housing, promoting economic growth, and managing environmental sustainability through green spaces, renewable energy, and conservation efforts. They plan and maintain infrastructure like transportation systems and essential services such as water supply and sewage. Engaging with the public to gather input and ensure transparency is vital, as is enforcing building codes and issuing permits for construction activities. Data

collection on population trends and economic conditions informs their planning decisions and forecasts future growth. They also collaborate with other governmental entities to ensure coordinated regional planning. Overall, these institutions shape the physical, economic, and social landscape of communities, ensuring development aligns with community goals and needs.

4.1.3.1 Dera Ismail Khan Urban Area Development Authority

The Dera Ismail Khan Urban Area Development Authority operates under the Khyber Pakhtunkhwa Urban Areas Development Authorities Act, 2020, which provides the legal framework for establishing development authorities across major urban centers in the province. Under this Act, the Authority is mandated to regulate and guide urban development within the Dera Ismail Khan urban area, ensuring organized growth, improved service delivery, and compliance with provincial planning and development standards. The Authority functions under the administrative control of the Government of Khyber Pakhtunkhwa, with responsibilities related to urban planning, land development, and oversight of urban expansion.

Core Functions (as defined in the KP Urban Areas Development Authorities Act, 2020):

- Preparation, approval, and execution of development schemes for the urban area.
- Regulation and control of land use, building operations, and development activities within its jurisdiction.
- Acquisition, management, and disposal of land for public purposes, development schemes, and infrastructure projects.
- Provision and improvement of civic services, including roads, public amenities, open spaces, and municipal facilities.
- Collection of betterment fees, development charges, and other prescribed levies under the Act.
- Coordination with relevant provincial and local government departments to ensure integrated urban development.

Organizational Structure:

The organizational structure is designed to ensure efficiency and accountability. The Authority is headed by a Director General, who oversees various directorates and departments including:

- Planning and Development – responsible for spatial planning and urban design.
- Engineering – manages civil works and infrastructure development.
- Estate Management – deals with property allotment, asset management, and housing schemes.
- Finance and Administration – handles budgeting, personnel, and internal administration.
- Regulation and Enforcement – ensures compliance with building codes and zoning regulations.

4.1.3.2 Tehsil Municipal Administration

The Tehsil Municipal Administrations (TMAs) are crucial parts of the local government system, responsible for managing municipal functions and services at the tehsil level. They are established under various Local Government Acts and play a central role in ensuring effective local governance and service delivery within their respective areas. Each TMA is headed by an elected Tehsil Nazim (Mayor) and a council, with administrative support from a Chief Municipal Officer (CMO) and various departmental heads.

TMAs are responsible for planning and managing urban development within their tehsil. This includes preparing and implementing master plans, zoning regulations, and development schemes. They oversee land use, property development, and infrastructure projects to ensure orderly growth and sustainable urbanization. Managing key infrastructure such as roads, bridges, public buildings, and street lighting is also part of TMAs' responsibilities. They ensure that infrastructure projects meet quality standards and cater to the needs of the community.

In addition, TMAs provide essential public services such as water supply, sanitation, waste management, and drainage, aiming to deliver these services efficiently and effectively to uphold public health and quality of life. TMAs also enforce local regulations related to building codes, land use, and environmental standards. They oversee the issuance of permits and licenses for construction, business operations, and other activities, and monitor compliance with regulations to maintain safety standards. Furthermore, TMAs implement various community welfare programs and development initiatives, which may include health services, educational facilities, recreational areas, and social services. They actively work to improve residents' living conditions and support community development projects.

Financially, TMAs generate revenue through local taxes, fees, and charges and manage the allocated financial resources to ensure proper budgeting and expenditure for various municipal services and projects. Engaging with residents through meetings, consultations, and feedback mechanisms, TMAs facilitate public participation in local governance. They address public grievances and complaints related to municipal services, ensuring that community concerns are addressed promptly. TMAs also coordinate with provincial and federal government agencies, as well as non-governmental organizations, to implement development projects and provide services. They ensure that local initiatives align with broader government policies and objectives. Additionally, TMAs play a role in managing emergencies and disasters within their jurisdiction, being involved in disaster preparedness, response, and recovery efforts.

Overall, Tehsil Municipal Administrations (TMAs) serve as the cornerstone of local governance at the tehsil level, carrying out a range of functions essential for urban and rural management. By fulfilling these functions, TMAs significantly contribute to the effective and efficient governance of local areas, addressing the needs of residents and supporting sustainable development.

4.1.3.3 Local Planning and Enforcement Unit (LP&EU)

As per Khyber Pakhtunkhwa Land-Use and Building Control Act 2021, the Local Planning and Enforcement Unit is established in each district to oversee land-use regulation and planning enforcement. This Unit comprises a Chief Planning Control Officer (CPCO), Planning Control Officers (PCOs), Inspectors, and additional staff appointed by the government in consultation with the relevant authority. The CPCO is responsible for the administration and operational functions of the Unit and reports directly to the DLUP&MC. Moreover, the Chief Officer is required to maintain coordination with local governance bodies, including the Chairperson of the Tehsil Council, City Mayor, Tehsil Municipal Officer, Director of the Urban Area Development Authority, as well as Deputy and Assistant Commissioners. This inter-agency coordination ensures transparency and accountability, particularly in identifying and reporting deviations from approved land-use and master plans.

The Unit's primary responsibilities include supporting the DLUP&MC in conducting surveys and preparing district land-use and master plans. It is also tasked with ensuring the implementation of relevant legislative provisions within its jurisdiction. Furthermore, the regulation empowers the government to appoint PCOs and Inspectors as required, and to authorize other agencies or designated officials to perform these roles during the enforcement period of the Act. Overall, this chapter emphasizes a structured, collaborative, and compliance-driven approach to land-use governance at the district level.

4.1.4 RACI Framework

Since multiple statutes govern land use and development control in KP, different authorities are legally empowered to perform functions that often intersect. For example, the KP Land Use and Building Control Act 2021 vests plan preparation and enforcement powers in the Council, Authority, and DLUP&MC; the Local Government Act 2013/2019 assigns municipal regulatory powers to TMAs. This fragmented legal landscape results in overlapping jurisdictions, parallel approval mechanisms, and weak accountability.

To simplify this, a **RACI framework has been adapted to RAC**. The “Informed (I)” category has been deliberately excluded, as passive information-sharing does not create enforceable obligations in the context of DLUP implementation. The focus is therefore on three binding functions:

- **Accountable (A):** the authority legally mandated to take final decisions under statute and answerable for outcomes (only one per function).
- **Responsible (R):** the institution tasked with executing technical or operational work; multiple actors may be responsible.
- **Consulted (C):** statutory or sectoral stakeholders whose clearance or input must be obtained before action is finalized.

Adapted RACI framework for implementation of DLUP is as follows:

Table 4-1: Adapted RAC Framework

Function	Council	Authority/ DG	DLUP&MC	TMA/ Development Authority / LP&EU	EPA/ Line Depts
Development of planning standards	A	R	C	C	C
Approve DLUP	A	R	A	C	C
Change in Land use*	A	C	A/R	R	C
Permit Issuance*	-	C/A	A/R	A/R	-
Inspections*	-	C	A/R	A/R	C
Enforcement*	-	A/R	A/R/C	A/R	C

A=Accountable, R=Responsible, C=Consulted

Functions marked with an asterisk (*) represent those domains where statutory mandates overlap and multiple authorities exercise partial jurisdiction under different laws and regulations. These include Change in Land Use, Permit Issuance, Inspections, and Enforcement, which are the most operationally sensitive aspects of DLUP implementation.

- For **Change in Land Use**, the KP Land Use and Building Control Act 2021 vests powers in the District Land Use Planning & Management Committee (DLUP&MC), but certain high-order changes require endorsement from the Provincial Council. TMAs and Development Authorities retain a role in forwarding applications and verifying compliance on the ground. This creates a dual chain of accountability that can lead to conflicting interpretations unless harmonized through standard operating procedures.
- For **Permit Issuance**, the Building Control Regulations 2024 designate TMAs and Development Authorities as the primary permitting agencies, while DLUP&MCs and the Authority are engaged in technical vetting for conformity with DLUP zoning. This multi-layered approval system results in joint accountability (A/R) entries in the table, indicating that no single institution exercises exclusive control.

- For **Inspections**, responsibility is distributed between TMAs/LP&EU as the frontline enforcement arms, DLUP&MCs for district-level oversight, and the Authority for technical audit. EPA and line departments are consulted for sector-specific compliance, such as environmental, irrigation, or heritage clearances. The absence of a single accountable body highlights the need for an integrated inspection protocol to avoid duplication and gaps.
- For **Enforcement**, statutory authority is fragmented: DLUP&MCs are accountable for ensuring conformity with DLUP zoning, TMAs/LP&EU are responsible for executing stop-work orders, sealing, or demolition, and the Authority provides legal and administrative backing. EPA and line departments intervene where sectoral conditions are breached. Because coercive action often faces political and legal challenges, overlapping mandates in this function pose the highest risk of institutional conflict.

This adapted RACI framework transforms fragmented statutory powers into a clear chain of authority. By explicitly defining accountability, responsibility, and consultation for each function, it minimizes overlaps, closes gaps in enforcement, and ensures that all DLUP-related actions remain both legally defensible and technically sound. The framework therefore provides a practical mechanism for coordinating provincial, district, and tehsil-level institutions in the effective implementation of District Land Use Plans.

4.2 Existing Rules and Regulations for Planning in Urban and Rural Areas

Khyber Pakhtunkhwa has a structured framework of rules and regulations governing urban and regional planning to ensure sustainable development, efficient land use, and the provision of civic amenities. These regulations are designed to guide the planning, development, and management of urban and regional areas within the province. The key legislative and regulatory instruments in Khyber Pakhtunkhwa for planning in urban and rural areas include the following:

4.2.1 Khyber Pakhtunkhwa Building Control Regulations 2024

The Khyber Pakhtunkhwa Building Control Regulations 2024 serve as the operational backbone of the KP Land Use and Building Control Act 2021. While the Act creates the authority and mandate, these Regulations set the detailed processes through which buildings are designed, approved, monitored, and enforced across the province. Their role is to translate the District Land Use Plans from a strategic vision into enforceable rules that guide development at the plot and building scale.

The Regulations apply province-wide, binding individuals, developers, and institutions in both urban and rural notified areas. They cover the full cycle of development: application, scrutiny, permitting, inspection, completion, and occupancy. In practice, this means no structure can be legally raised or occupied without going through these prescribed steps.

Procedurally, they standardize development and building permits, specifying required documents, timelines, and fees. They set subdivision and plot standards, right-of-way widths, and land reservations for social facilities and utilities. At the building level, they regulate setbacks, heights, FAR, parking, seismic and fire safety, accessibility, and environmental safeguards. Contemporary needs are addressed through provisions for high-rises, mixed-use buildings, and hazard-prone areas. Enforcement mechanisms include staged inspections, mandatory occupancy certificates, sealing or demolition of unauthorized works, penalties on violators and professionals, blacklisting of repeat offenders, and utility restrictions for non-compliant projects. Appeals are available at district or provincial level. The Regulations' main strengths are their direct alignment with DLUP zoning, their focus on hazard-sensitive design and fire safety, their link between planning approvals and utility clearances, and their inclusive features like universal accessibility.

Despite these strengths, challenges remain. TMAs and districts face limited technical capacity, especially for structural vetting and enforcement. Political interference and weak inspectorates reduce the impact of penalties. Heavy reliance on manual submissions allows delay and corruption to creep in.

Areas for improvement include:

- Digitizing the permitting and inspection process, with GIS integration to automatically check applications against DLUP zoning and hazard overlays.
- Building technical capacity in TMAs and districts, especially in structural safety, environmental compliance, and legal enforcement.
- Clarifying rules on compounding to prevent regularization of serious violations, especially in floodplains, ROWs, or hazard zones.
- Introducing performance bonds and phased serviceability requirements for large developments, ensuring infrastructure delivery before occupation.
- Publishing permits, violations, and enforcement actions online to reduce discretion, increase transparency, and build public trust.

Overall, the 2024 Regulations are a strong step toward standardizing development control in Khyber Pakhtunkhwa. They make DLUPs enforceable, improve safety, and set clear rules for growth. The challenge now is building the institutional capacity and digital systems to enforce them consistently and transparently across districts.

4.2.2 Khyber Pakhtunkhwa Housing Schemes (Planning, Development and Control) Regulations 2024

The Khyber Pakhtunkhwa Housing Schemes (Planning, Development and Control) Regulations 2024 establish the statutory framework for the preparation, approval, development, and monitoring of housing schemes within the province. They operationalize the KP Land Use and Building Control Act 2021 by defining technical standards, developer obligations, and enforcement mechanisms necessary for regulating private and public sector housing development. Their scope extends to new housing schemes, extensions to existing schemes, and regularization of unauthorized layouts, provided such regularization conforms to notified land-use designations under the District Land Use Plan (DLUP).

Key features of the Regulations include a structured approval process requiring proof of ownership, master layout plans, utility designs, and environmental assessments where applicable. Proposals are vetted by TMAs and cleared by the DLUP&MC, with final approval dependent on DLUP zoning, infrastructure capacity, and planning standards. Technical requirements cover minimum plot sizes, FAR, density limits, land reservations for social facilities, and phased development to ensure serviceability before sales. Developers must provide internal infrastructure at their own cost, transfer reserved land to authorities, and submit performance guarantees tied to completion. Enforcement provisions empower authorities to halt or demolish unauthorized schemes, blacklist violators, restrict utility services to unapproved projects, and conduct staged monitoring, with appeal rights available at district and provincial levels.

The regulations' strengths lie in embedding DLUP zoning as a binding criterion, ensuring provision of social facilities, requiring performance guarantees, and protecting consumers by criminalizing unapproved scheme marketing. However, gaps persist: weak technical capacity at TMA and DLUP&MC levels undermines scrutiny and monitoring, reliance on manual submissions increases risks of delay and malpractice, and regularization provisions may inadvertently encourage violations. Political interference weakens enforcement, while hazard-sensitive planning such as flood risk management, seismic safety, and slope stability is insufficiently integrated. Following recommendations can be followed to further strengthen these regulations especially in terms of DLUP:

- Digitize the permitting and approval system with GIS integration for automatic checks against DLUP layers and hazard zones.
- Strictly enforce phasing and performance bond requirements, prohibiting sale or transfer of plots before infrastructure delivery.
- Narrow the scope of regularization, excluding hazard-prone and environmentally sensitive areas.

- Establish a public online portal of approved schemes to enhance consumer protection.
- Build technical capacity of TMAs and DLUP&MCs in planning, engineering, and enforcement, with strong provincial oversight.
- Integrate climate resilience standards, including flood risk zoning, seismic safety, and slope stability, into the regulatory framework.

For DLUPs, these Regulations are indispensable, making density targets, facility reservations, and zoning protections enforceable at the scheme level. Proper implementation can prevent sprawl, safeguard critical land uses, and deliver serviced, resilient housing.

4.2.3 Khyber Pakhtunkhwa Urban Policy 2023

The Khyber Pakhtunkhwa Urban Policy 2023 is a strategic framework aimed at fostering sustainable urban development throughout the province. It addresses the complex challenges faced by urban areas while enhancing the quality of life for residents. The policy outlines detailed guidelines for urban planning, focusing on sustainable growth, inclusivity, and economic development.

The primary goal of this policy is to promote organized and sustainable urban expansion. It emphasizes strategic land use and floor area planning, ensuring that growth aligns with environmental and community needs. A significant aspect of the policy is the promotion of affordable housing, ensuring that urban development initiatives are inclusive and accessible to all social segments. The policy also prioritizes economic and real estate development as key drivers of urban prosperity.

A major focus is placed on improving municipal services and overall urban livability. This includes effective traffic management strategies to enhance mobility and reduce congestion. The policy also aims to boost tourism, particularly in cities and the northern zone, contributing to broader economic goals. To ensure successful implementation, the policy stresses the importance of building institutional capacity and developing long-term city management strategies.

However, the Khyber Pakhtunkhwa Urban Policy 2023 faces several challenges. Ensuring adherence to legal and regulatory frameworks is difficult, requiring strong enforcement mechanisms. Balancing economic growth with environmental sustainability is also a critical issue, as urban expansion must be ecologically responsible. The policy's success depends on inclusivity and meeting the diverse needs of urban populations. Long-term monitoring and evaluation mechanisms are necessary but require ongoing resources and support. Additionally, consistent political and administrative backing is crucial for the policy's effective implementation.

In summary, the Khyber Pakhtunkhwa Urban Policy 2023 sets a comprehensive and strategic direction for sustainable urban development. By focusing on key areas like land use planning, affordable housing, economic development, and improved municipal services, the policy aims to create inclusive, livable, and sustainable urban environments. Despite the challenges of enforcement, sustainability, and inclusivity, it provides a robust framework for guiding the future growth of urban areas in the province.

4.3 Institutional Gaps and Implementation Strategy

Despite the presence of a legislative and administrative framework for land use planning at the provincial and district levels, effective implementation remains hindered by several institutional shortcomings. Key challenges include limited technical and human resource capacity, poor inter-agency coordination, weak monitoring and enforcement mechanisms, and minimal stakeholder engagement. Local planning units often operate without qualified professionals such as urban planners and GIS experts, leading to delays in plan preparation, poor compliance, and ineffective development control. Fragmented mandates, cumbersome regulatory processes, and lack of data-sharing protocols further exacerbate inefficiencies and duplication of efforts.

4.3.1 Institutional Gap Analysis and Actionable Mechanisms

To address these issues, a set of targeted, actionable mechanisms has been developed to strengthen institutional performance and bridge the gap between planning and implementation. These include establishing formal coordination bodies, implementing training programs, introducing GIS-based monitoring tools, reforming regulatory procedures, and creating participatory platforms for community engagement. The following table outlines the key institutional gaps and corresponding strategies designed to enhance accountability, coordination, and responsiveness in the planning system.

Table 4-2: Gap Analysis and Proposed Mechanism

Identified Gap	Detailed Description	Proposed Mechanism / Action Plan	Responsible Institutions
Ambiguous Regulatory Roles and Overlaps	Institutional mandates are sometimes overlapping or undefined, resulting in confusion over responsibilities (e.g., plan approval vs enforcement).	<ul style="list-style-type: none"> Revise and harmonize regulations to clearly demarcate roles. Issue standard operating procedures (SOPs) for plan review, approval, and monitoring. Set up grievance handling protocols for inter-agency disputes. 	Provincial Land-Use and Building Control Council, Provincial Land-Use and Building Control Authority, any other related department/ authority
Fragmented Inter-Agency Coordination	Agencies at provincial, district, and tehsil levels often operate in silos with unclear communication and reporting lines. This leads to duplication of work and conflicting decisions in planning and enforcement.	<ul style="list-style-type: none"> Establish formal coordination committees at each level. Conduct quarterly inter-departmental coordination meetings. Develop shared digital dashboards for real-time data sharing. 	DLUP&MC, any other related department
Inadequate Institutional Capacity	District and tehsil-level units often lack adequately trained urban planners, GIS experts, data analysts, and enforcement officers, limiting the quality and timeliness of plan implementation.	<ul style="list-style-type: none"> Launch mandatory training & certification programs for planning staff. Hire technical staff through P&D-led recruitment. Allocate dedicated funds for technical equipment and planning software. 	P&D Department, any other related department
Weak Monitoring and Enforcement System	Lack of real-time monitoring tools and irregular site inspections lead to unauthorized developments going unchecked.	<ul style="list-style-type: none"> Integrate GIS-based monitoring systems. Schedule routine and surprise inspections. Publish quarterly compliance and enforcement reports. Establish citizen complaint response mechanisms. 	TMA, LP&EU, any other related department
Obsolete Land Use Data and Delayed Updates	Land use plans are often based on outdated or incomplete data, and there is no structured timeline for their periodic review.	<ul style="list-style-type: none"> Make five-year plan revision mandatory by regulation. Institutionalize data collection using satellite imagery and public surveys. Create a rolling update mechanism at the district level. 	DG of Authority, DLUP&MC, LP&EU, Urban Planning Policy Unit, any other related department

Identified Gap	Detailed Description	Proposed Mechanism / Action Plan	Responsible Institutions
Limited Community Engagement and Public Awareness	Citizens remain unaware of land-use regulations, their responsibilities, or the grievance redressal mechanisms available to them.	<ul style="list-style-type: none"> Launch public education campaigns (radio, TV, social media, town halls). Establish digital portals for plan access and feedback. Form citizen advisory groups for plan reviews. 	DLUP&MC, LG Department, Communication & Outreach Unit, any other related department
Lack of Specialized Technical Input in Decision-Making	Strategic decisions are often made without input from subject experts, resulting in plans that may lack technical depth.	<ul style="list-style-type: none"> Form Expert Advisory Panels with GIS, climate, transport, and housing experts. Involve academia and research institutes in plan review stages. Institutionalize co-opting of experts in District Committees. 	Provincial Council and Authority, DLUP&MC, P&D Experts Pool, any other related department
Insufficient Funding for Implementation	Planning and enforcement units face budgetary constraints that affect staffing, technology adoption, and project execution.	<ul style="list-style-type: none"> Introduce dedicated development and enforcement budget lines. Mobilize funding through betterment charges and public-private partnerships (PPPs). Explore federal and donor funding for capacity building. 	Finance Dept., P&D, District Governments, any other related department
Weak Legal Enforcement and Appeal Mechanisms	Legal processes for penalizing violations or resolving appeals are often slow and cumbersome, reducing the credibility of enforcement.	<ul style="list-style-type: none"> Strengthen the Appellate Tribunal with adequate staffing and infrastructure. Simplify and digitize appeal filing processes. Publicly disclose tribunal decisions to ensure transparency. 	Appellate Tribunal, Law Department, Provincial Authority and Council, any other related department
Disconnected Infrastructure Planning	Land-use decisions are not always aligned with utility and transport infrastructure planning, creating long-term inefficiencies.	<ul style="list-style-type: none"> Mandate joint planning between land-use and infrastructure agencies. Require infrastructure feasibility reports with all major land-use changes. Create integrated spatial development models. 	LG & Public Health Engineering, Transport Department

The legal framework for DLUP implementation provides a comprehensive statutory and institutional foundation. It links provincial policy-making with district-level planning and local enforcement through a coordinated chain of authority, further clarified by the adapted RACI framework. The integration of supporting regulations including building control, housing schemes, and urban policy, strengthens enforceability at both scheme and plot levels. However, effective outcomes will depend on addressing institutional gaps, particularly by enhancing technical capacity, embedding hazard and climate resilience standards, ensuring citizen engagement, and digitizing monitoring and permitting systems. With these improvements, the framework has the potential to transform DLUPs from policy documents into binding instruments for orderly, resilient, and transparent land-use governance across the province.

4.3.2 Institutional Interventions Recommended for the Execution of District Land Use Plan

In order to implement the DLUPs efficiently, the relevant institutions need to follow an improved level of coordination and perform actions under the jurisdiction of the KP Land Use and Building Control Act 2021. A better understanding and compliance of the regulations and an improved level of coordination among the relevant stakeholder departments will improve the success of execution of the DLUPs without creating the need for establishing a new body for the implementation of the DLUPs. To enhance execution of the DLUPs and ensure compliance with all regulatory measures, the consultant proposes the following measures.

4.3.2.1 Provincial Overseeing and Policy Supervision

The Provincial Land Use and Building Control Council should carry out the responsibility of providing strategic overseeing and insights by reviewing and then approving the DLUPs, the zoning, and relevant plans. Thereafter, the Provincial Land Use and Building Control Authority via the office of its Director General should issue guidelines for initiating the implementation of planning measures in compliance with the zoning regulations at district level. In this regard, the Authority should also offer technical assistance and guidance to ensure that the DLUPs are implemented with consistency in all relevant districts.

4.3.2.2 Strengthening District-Level Coordination and Decision-Making

The **District Land Use Planning & Management Committee** should also play its role in the implementation of the DLUPs by acting as the main body facilitating coordination and approving plans at the district level. After reviewing and approving the DLUPs, it should ensure conformity of the other public sector projects with the DLUPs to eliminate the risks of duplication and extraneous public spending. This will ensure efficiency in the implementation of the DLUPs. In this regard, the consultant proposes that the Committee must have meetings on regular basis to ensure compliance with the regulatory requirements amid the implementation of the DLUPs.

4.3.2.3 Enhancing Local Implementation and Enforcement Capacity

The TMA should play the role of the primary implementation agency that should extend permissions to the municipality for building control and development in accordance with the DLUP zoning regulations. In this regard, it should also identify the violations upon noncompliance with the DLUPs and regulatory measures.

4.3.2.4 Permitted, Permissible, and Prohibited Zoning

The existing zoning compliance should be followed stringently. The permitted, permissible, and prohibited zoning should be followed according to the zoning proposed in the DLUPs as well as the provincial land use laws. That is, the permissibility and prohibited nature must be determined in accordance with the zoning proposed in the DLUPs which is already made in compliance with the existing laws and regulatory frameworks; the consultant has affirmed this in accordance with the existing laws. In any circumstances, the prohibited uses shall not be approved by the TMAs and relevant authorities. Upon finding prohibited development and land use, the TMAs shall take action and impose penalties on violations. Additional security measures must be taken by the relevant authorities.

4.3.2.5 Improving Monitoring, Enforcement, and Coordination

Well-coordinated GIS-based monitoring and inspection of land should be carried out for ensuring enforcement of relevant laws and the implementation of DLUP zoning. For this purpose, the TMA and the sectoral

departments should carry out checks for conformity of the DLUP zonings prior to initiating the implementation of the plans. Thereby, the TMAs will ensure compliance with laws and DLUP proposed zonings in an active and participatory manner.

4.3.2.6 Agencies Responsible for Implementing the DLUP and their Interventions

4.3.2.6.1 Provincial Land-Use and Building Control Council

Responsibilities:

- i. Provides policy oversight and statutory approval
- ii. Approves the District Land Use Plan, zoning regulations and major amendments.
- iii. Provides strategic direction and resolves high-level policy or inter-departmental issues.
- iv. Ensure province-wide consistency in land-use planning and regulation.

4.3.2.6.2 Provincial Land-Use and Building Control Authority through DG

Responsibilities:

- i. Offer regulatory guidance, technical oversight, and monitoring
- ii. Issues planning standards, zoning guidelines, and SOPs for DLUP execution.
- iii. District-level Implementation and Compliance Monitoring
- iv. Provides technical support, capacity building, and guidance to district and local institutions.
- v. Reviews and endorses district reports and enforcement performance.

4.3.2.6.3 District Land Use Planning & Management Committee (DLUP&MC)

Essential Responsibilities:

- i. Facilitate district-level coordination, approval, and oversight
- ii. Coordinate implementation of the DLUP in the district.
- iii. Review change-of-land-use cases and development proposals for DLUP conformity.
- iv. Oversee inspections, enforcement actions, and resolution of land-use violations.
- v. It aligns public sector projects with approved zoning.

4.3.2.6.4 Tehsil Municipal Administrations (TMAs)

Key Responsibilities:

- i. Carry out primary implementation and development control
- ii. Process and issue building permits and development approvals in-line with DLUP zoning.
- iii. Enforce building control regulations and municipal bylaws.
- iv. Provide municipal services and infrastructure consistent with the proposed land-use zoning.
- v. Coordinate with District Land Use Planning and Management Committee as well as with the Local Planning and Enforcement Unit during inspections and enforcement.

4.3.2.6.5 Local Planning and Enforcement Units

Main Responsibilities:

- i. Perform frontline monitoring and enforcement
- ii. Conduct routine and special inspections for compliance with zoning in DLUP.
- iii. Identify violations, issue notices, and recommend enforcement actions.
- iv. Maintain records of land use and support monitoring based on GIS.
- v. Report violations and compliance status to District Land Use Planning and Management Committee

4.3.2.6.6 Line Departments and Utility Agencies

(Environment, Irrigation, Transport, Energy, Public Health Engineering etc.)

Main Duties:

- i. Perform sectoral compliance and coordination
- ii. Ensure that sector-specific projects and clearances align with DLUP zoning.
- iii. Provide technical clearances and input during review of permissible/conditional uses.
- iv. Coordinate with relevant departments about infrastructure planning in compliance with land-use zoning.

4.3.2.6.7 Planning & Development Department

Main Responsibilities:

- i. Ensure integration of Development Planning and Public Investment
- ii. Alignment of public sector development projects and ADP schemes with DLUP zoning.
- iii. Support capacity building, data systems, and monitoring activities.
- iv. Facilitate coordination between provincial policies and district-level execution.

4.3.2.6.8 Overall DLUP Implementation and Regulatory Structure

- *Policy & Approval* should be performed by the PLUP Council
- *Technical Oversight* should be provided by the PLUP Authority
- *Coordination & Enforcement* shall be done by the District Land Use Planning and Management Committee and the TMAs
- *Execution and overseeing* permissible and prohibited aspects shall be dealt by the TMAs.
- *Field Enforcement* shall be carried out by the Local Planning and Enforcement Unit.
- *Sectoral compliance* is to be done by the line departments.