



योजना तथा वास्तुकला विद्यालय, विजयवाड़ा
School of Planning and Architecture, Vijayawada
An Institute of National Importance, Ministry of Education Gov. of India

School of Planning and Architecture Vijayawada

DEPARTMENT OF PLANNING

STUDIO BRIEF – B. Plan VII Semester VI Year (JUL 2026 to NOV 2026)

SUBJECT NAME: REGIONAL PLANNING STUDIO (PLN411)

Integrated Regional Development Plan: Vijayapura District, Karnataka, India 2047

Studio Faculty:

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INTRODUCTION

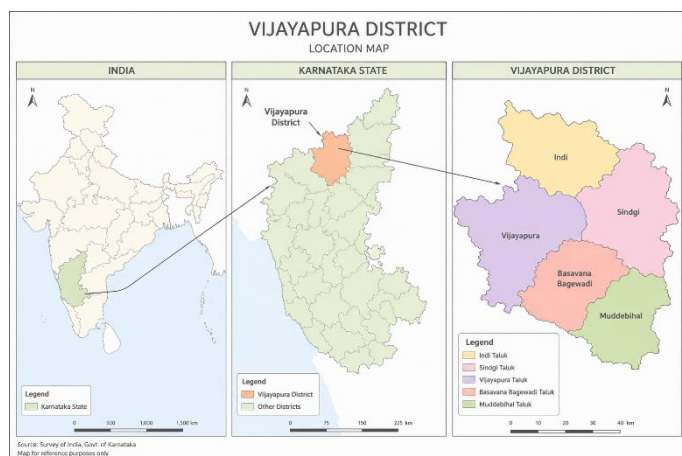
The fourth-year Bachelor of Planning (B.Plan) students will undertake a Regional Planning Studio to understand and address the development challenges and opportunities of Vijayapura District, Karnataka. Through baseline studies, field investigations, GIS-based spatial analysis, and stakeholder interactions, students will examine the district's physical environment, settlement structure, economy, infrastructure, natural resources, governance, and development potential. The studio aims to prepare planning strategies that contribute to the *Integrated Regional Development Plan for Vijayapura District - 2047*, with an emphasis on sustainable, inclusive, and climate-resilient development. As part of the studio, students will also document and learn from traditional planning practices, indigenous resource management systems, and cultural landscapes, recognising the value of Indian Knowledge Systems (IKS). Their findings will not only support the preparation of the regional plan but also help document and strengthen local knowledge, demonstrating how traditional wisdom can continue to inform contemporary regional planning.

CONTEXTUAL SETTING AND CONCERN

Area: 10,541 sq. km

Population: 21,77,331

Vijayapura District (historically Bijapur) lies in the North Karnataka Region and forms part of the Deccan Plateau and is divided into 2 sub-regions **Vijayapura sub-region** with area of ~6126 sq.km and **Indi sub-region** with area of ~4374 sq.km. It shares administrative boundaries with Maharashtra to the north, Bagalkot District to the south, Belagavi District to the west, Kalaburagi District to the



Map 1. Location map of Vijayapura District



east, and Sangli District (Maharashtra) towards the northwest.

The district is located approximately between 15°50' N and 17°28' N latitude and 74°54' E and 76°28' E longitude, covering a geographical area of about 10,541 km², representing approximately 5.3% of Karnataka's geographical area.

The district forms part of the Northern Dry Zone of Karnataka and experiences a semi-arid tropical climate with hot summers, moderate winters, and highly variable rainfall. The geology is dominated by Deccan Trap Basalt, giving rise to extensive black cotton soils, which are particularly suitable for crops such as cotton, jowar, pulses, oilseeds, and sugarcane.

Vijayapura, the administrative setup includes 13 distinct Taluks, municipalities, hoblis, and villages and urban local bodies that contribute to its governance and development

The climate of Vijayapura is predominantly semi-arid, characterized by hot summers, moderate winters, low and erratic rainfall and high evapotranspiration. The district receives an average annual rainfall of approximately 658 mm, concentrated mainly during the southwest monsoon between June and September. Rainfall variability significantly influences agricultural productivity and water availability.

Major Development & Planning Potentials:

- **The Infrastructure Surge:** Recent macro-capital investments such as the upcoming greenfield airport, specialized aviation manufacturing setups, and expanding wind-energy grids (Suzlon) are rapidly reshaping the district's land use.
- **The Aridity & Imbalance Challenge:** As a drought-prone, semi-arid tropical zone with a highly erratic 658 mm average annual rainfall, the district faces extreme groundwater depletion and regional economic stagnation compared to Southern Karnataka.
- **The Heritage-Ecological Paradox:** Vijayapura features dense pockets of globally recognized archaeological monuments (Adil Shahi dynasty heritage) and environmentally sensitive zones (e.g., Mamadapur). The challenge lies in balancing aggressive macro-infrastructure growth with strict conservation buffer zones and Blue-Green Infrastructure (BGI) revitalization.

Alongside these challenges and potentials, Vijayapura's rich archaeological heritage, traditional water management systems, and historic settlement patterns offer valuable opportunities to document and learn from Indian Knowledge Systems (IKS), while exploring how these practices can inform sustainable and context-sensitive planning today. These characteristics make Vijayapura an ideal study area for understanding integrated regional planning and preparing a long-term Regional Development Framework.

APPROACH OF STUDY

The students will undertake a detailed development analysis of Vijayapura District, focusing on the following components and sectors:



- i. **Land Use and Land Cover** - Assessing current land use patterns, land cover changes, and their impact on biodiversity.
- ii. **Regional Setting and Administrative Structure** – Understanding the regional context, administrative hierarchy, functional linkages, and spatial characteristics of Vijayapura District.
- iii. **Settlement Hierarchy** - Analysing urban-rural settlement patterns and their implications for infrastructure and services.
- iv. **Industries and Connectivity** - Balance aggressive industrial/aviation-led growth with delineation of the greenfield airport's economic catchment zone, logistics hubs, and multimodal freight networks.
- v. **Agriculture & Agro-Industrial Linkages:** Mapping cropping patterns, value chains, and regional market access.
- vi. **Water Resources & Climate Resilience:** Formulation of regional scale water-security frameworks, watershed management plans, and drought risk models
- vii. **Heritage, Tourism and Cultural Assets** – Identifying heritage resources, tourism potential, cultural landscapes, and opportunities for designing tourist circuits leveraging public-private partnerships (PPP) while enforcing strict conservation zoning rules..
- viii. **Environment, Climate Resilience and Disaster Risk** – Assessing environmental quality, climate vulnerability, groundwater stress, drought risk, and disaster resilience.
- ix. **Regional Governance and Development Potential** – Reviewing institutional arrangements, government programmes, investment opportunities, and implementation mechanisms supporting balanced regional development.
- x. **Indian Knowledge Systems and Cultural Landscapes** – Documenting traditional water management systems, vernacular settlements, indigenous agricultural practices, cultural landscapes, and community-based resource management to inform sustainable regional planning.

Detailed assessment methodologies will include:

- Regional Profiling and GIS Database Development
- Land Use and Spatial Analysis
- Settlement Hierarchy and Growth Centre Analysis
- Transportation and Accessibility Analysis
- Infrastructure Gap Assessment
- Water Resource and Environmental Assessment
- Economic and Livelihood Analysis
- SWOT and Regional Diagnosis
- Development Scenario Building
- Regional Structure Plan and Development Framework
- Implementation and Phasing Strategy

Based on these analyses, students will formulate integrated regional planning strategies for settlements, transportation, infrastructure, agriculture, economy, tourism, environment, and governance, culminating in a comprehensive **Integrated Regional Development Framework for Vijayapura District - 2047**.

LEARNING OUTCOME



The studio aims to develop students' understanding of integrated regional planning through fieldwork, GIS applications, spatial analysis, and stakeholder engagement. Students will strengthen their ability to analyse regional issues, prepare evidence-based planning strategies, and develop an Integrated Regional Development Framework for sustainable, inclusive, and climate-resilient development. The studio will also encourage students to document and appreciate Indian Knowledge Systems (IKS) by exploring traditional planning practices, indigenous resource management systems, and cultural landscapes, and understanding their relevance to contemporary regional planning.

PROPOSED EXECUTING PLAN FOR STUDIO (AS FOLLOWED)

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Unit and Assignment
Week 1	Literature and Document Review on Selected Themes	
Week 2	Shortlisting of Case Studies – Identification of Problem statement and Regional Context	1st Review on Reg. Planning Theories, Act and other relevant documents (Marked)
		Literature Synthesis
		District Review
Week 3	Preparing inception report – Identification of vision, objectives, tasks, data checklist, Preparation of Base Map and Secondary Data layers;	Broad Vision and Methodology
		2nd Review on Case Specific Vision, Concept and Timeline (Marked)
		(Case Study – Enlisting of Potential Analysis and Maps)
Week 4	Survey format preparation, Mock of Field data collection, surveying, networking and asset allocation.	3rd Review on Thematic Objectives, Maps and Data Requirements (Marked)
		REPORT SUBMISSION – 1 (Inception Report)
		Assignment 1 (All previous reviews and revised report) – Delivery of Survey Regime & formats
Week 6-7	Field Trip	(As per Survey Design)
Week 8	Data Compilation and Preliminary Analysis – Submission of Gap Assessment Report (Phase I – Baseline Assessment)	Presentation on Data Management Technique and Data Bank
		Segregation of Data as per Sectors/Themes
		Representation of Information and Key Takeaways in various identified sectors/themes



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Week 9	Mid- Semester Assessment week	Assignment 2 Review (Outcome Report – 1: Baseline Assessment) (Marked)
Week 10	Proposed One/two-day Workshop on Vision, Methods and Way forward	
Week 11	Analysis – Detailed Analysis and Scenario Building	Introduction to Assignment 2 and its components
Week 12	Detailed Analysis and Scenario Building	Assignment 3 Part A (Outcome Report 2 – Sectoral Projections & Analysis) (Marked)
Week 13	Detailed assessment with Preliminary Proposal	Assignment 3 Part B (Outcome Report 3 – Thematic Proposals)
		Special Lecture
Week 14	Internal Review & Draft Report	Submission of Outcome Report – 3 Part A & B Projections and Thematic proposals (Marked)
Week 15	Strategy Development and Proposal Detailing (detailed Sectoral Level Proposals) Amalgamation of all sectoral proposals at the regional level.	Assignment 3 Part C: (Outcome Report 4 – Detailed Proposals) (Marked)
Week 16	Submission of Complete Report and Review	Assignment 3 (Part A+B+C): Internal Review and Complete Report Submission (Marked)

Suggested Readings:

1. **Birch, Eugenie L. (2008).** *The Urban and Regional Planning Reader*. Routledge Urban Reader Series, Routledge, USA.
2. **Chaudary, J. R. (2009).** *An Introduction to Development and Regional Planning with Special Reference to India*. Orient Blackswan, Hyderabad.
3. **Hall, Peter. (2002).** *Urban and Regional Planning*. Routledge, London and New York.
4. **Mishra, R. P. (1992).** *Regional Planning: Concepts, Techniques, Policies and Case Studies*. Concept Publishing Company, India.
5. **Wang, Xinhao & von Hofe, Rainer. (2007).** *Research Methods in Urban and Regional Planning*. Springer, Berlin, Heidelberg and New York.

Note:

1. Any other closed holidays as declared by SPAV shall supersede the above studio progression.
2. Assessment Sessions may be re-scheduled, with prior intimation.
3. Reading lists provided is not exhaustive and is subject to addition – students are advised to follow progression of class to keep abreast of the new reading lists, if any.