

FACULTY OF ARCHITECTURE

PARUL UNIVERSITY

PROPOSED SYLLABUS

FIRST YEAR M.PLANING (URBAN AND REGIONAL PLANNING) 2NDSEMESTER

SUBJECT: URBAN AND REGIONAL PLANNING STUDIO-I

Subject Code: 01201151

Focus:

- To understand the Characteristics of the City and Preparation of Sustainable Development Plan and
- To understand the concept of Village and Block Level or Taluka Planning

Content:

Geo-Informatics Laboratory Training

The laboratory training will be conducted in accordance with the studio exercise.

Introduction to Geo-informatics, introduction to Remote Sensing – Aerial and Satellite; introduction to GIS, Spatial data and Attribute data; Satellite images as input to GIS; Collection and presentation of baseline information

Development Plan

The studio exercise focuses on the planning, development and design aspect (in line with the other core and elective courses offered in the semester). The exercise pertains to large cities and emerging metropolitan cities and ranges from preparation of sustainable development plans to sector specific themes pertaining to tourism, SEZs, etc. The studio exercise enables students to develop an approach/ framework for the task; it is field based as a database is generated that is analyzed and the plan and strategies are formulated.

Initial study involves understanding of the exercise through theories, study of similar case studies, awareness of relevant norms and standards through extensive literature search. Students are required to prepare a comprehensive list of required data and identify probable sources before making a field visit to the case study town/city. Students are encouraged to translate learning from the core and elective subjects to the studio exercise. The introduction of GIS in the studio enables them to apply it in the studio exercise. Students are expected to analyze the data collected and come out with proposals and recommendations for planned development of the city. The entire exercise is also documented in the form of a technical report.

The second exercise is a short and intensive exercise of one-month duration. It pertains to topical issues i.e. property tax reforms, informal sector, development of railway land, etc. The study is based on primary surveys and students are expected to analyze the information and arrive at recommendations.

Block or Taluka Planning

Block or Taluka Planning has been practiced in India since Independence. After the 73rd and 74th CAA, the emphasis has been placed on district planning which in turn has given scope to do Block or Taluka planning so as to achieve inclusive development. The students are required to prepare a detailed Block or Taluka Plan for a selected block(s) in a district and come out with a detailed analysis, proposals for development and written report.

References:

1. 'Validity and the Review of Literature, Review in the Schools' by A. Dellinger
2. 'Doing a Literature Review, Releasing the Social Science Research Imagination' by C.Hart, Sage and Open University
3. 'A Student's Writing Guide: How to Plan and Write Successful Essays' by G. Taylor, Cambridge University Press
4. 'The Complete Guide to Referencing and Avoiding Plagiarism (Open up Study Skills)' by Neville Colin, Open University Press
5. 'An introduction to Social Research: Quantitative and Qualitative Approaches', Keith Punch, SAGE Publications
6. 'Working with Maps', K. K Gupta and V. C Tyagi, 105, Printing group, Survey of India, Dept. of Science and Technology, Government of India
7. 'Manual of Integrated District Planning', Planning Commission, Planning Commission

SUBJECT: ADVANCED PLANNING TECHNIQUES

Subject Code: 01201152

Focus: To study Advanced Planning Techniques such as surveying techniques, GIS Mapping, Analytical techniques, Report writing and Presentation.

Content:

Survey Techniques

Data Base for Physical surveys (including land use / building use / density / buildingage, etc.) and Socio-economic surveys; Questionnaire formulation, Sampling and survey techniques, etc. Land use classification / coding

GIS Mapping

Coordinate system, Geo-referencing and geo-coding; GIS data processing (Digitization, topology building and metadata creation), Data structures and modeling, GIS analysis (Buffer, proximity and overlay), Decision making through GIS, Information systems (Land Information system, Urban Information system for various activity sectors)

Research Design and implementation

Approaches in research, developing a method for research; Questionnaire Design, Types of data, sampling methods; developing aims, objectives, scope, limitations; and literature research – using library, accessing the Internet

Analytical Techniques, Presentation and Report Writing

Data tabulation; Interpretation of information; Graphical presentation of data; Spatial representation of data; Types of reports with specific focus on technical report writing; Organizing the report, structure chapter organization, Writing the report (analytical findings); Referencing in text, use of software in referencing

References:

1. 'Survey Methodology' by R.M. Groves, F.J. Fowler, M.P. Couper, J.M. Lepkowski, E. Singer, R. Tourangeau, John Wiley and Sons
2. 'Urban Planning and Development, Application of GIS' by S. Easa, Y. Chan (Editor), American Society of Civil Engineers.
3. 'Research Design' by John W. Creswel, Sage Publications
4. 'Writing the Winning Thesis' by A. Glatthorn and R. L. Joyner, Corwin Press

SUBJECT: INFRASTRUCTURE PLANNING AND MANAGEMENT

Subject Code: 01201153

Focus: To study the Significance of Infrastructure in Urban and Regional Planning and Development.

Content:

Infrastructure Planning and importance of Regional Infrastructure

Equity, Access, level and Efficiency, Quality of Service, Paying Capacity, Pricing of Infrastructure Services; Ownership and Control: Public, Private, SPV, and PPP Models in infrastructure provision, Multi-service providers and their operation at various levels. Infrastructure Policy: Regulatory and Facilitative, Investment Requirement at various levels and actual investments in Infrastructure; Role of Infrastructure in regional development, Critical Infrastructure in regional development, and Indicators of infrastructure development in defining regional development, standards and bench marks for infrastructure provision and delivery at various levels; Role of Spatial Information Technology (SDI) in the planning, provision, and monitoring infrastructure.

Water Supply and Sanitation

Quantity and quality, source of supply, transmission and distribution, treatment methods, design guidelines.

Introduction: Sources of water, current scenario: Conflicts and Co-operation – Transboundary water conflicts: inter-state, international water treaties, National Water Policy, Water Rights: Excess and under utilization of water. Access standards, demand and supply analysis, pricing parameters, conservation issues, technology: extraction, cleansing, recycling and reuse. Pollutions associated with water.

Institutions in Water provision: PPP, SPV in water; Role of Community in water provision. Conflicting use of water: Agriculture vs. Water harvesting; Water for Irrigation: Source, Access, Trans-boundary conflicts and co-operation, pricing, demand and supply conditions. Regulatory and Facilitative policies, Investments in Irrigation: Minor, Major irrigation and issues related to these. Technology

in irrigation (systems); equity, efficiency and pricing issues in irrigation; Drinking /Potable Water: Source, provision at various levels (Village, City and District) equity, efficiency, leakages and unaccounted water and its minimization; Privatization of Water and its implications. Pricing and access; Spatial variations in standards and provisions.

Sanitation – concepts, disposal systems, low cost sanitation options; engineering aspects of sewage disposal;

Policies and Programmes in the provision of Sanitation at various levels: Rajiv Gandhi Technology Mission on Water Supply and Sanitation (Rural), City Sanitation Plan, State Sanitation Strategies; Sanitation and MDG, Resource Commitment for Sanitation. Access to Sanitation: cost and coverage, role of institutions: public, private, PPP, community involvement, sanitation and environment, sanitation and health.

Wastewater – generation, disposal system

Storm water drainage – systems

Solid Waste Disposal and Management

Basic principles, generation, characteristics, collection, disposal, management

Waste in Rural Areas: types of waste, problems and re-use; community involvement in collection, treatment and re-use.

Waste in Urban Areas: collection and disposal, technological innovations, formal and informal institutions in waste collection.

Role of ULBs, NGOs, informal networks, rag-pickers, solid waste as an economy issue, cost recovery in solid waste.

Fire and Electrification, and Social Infrastructure

Planning for fire protection, services and space standards, location criteria; Planning for Education, health, civic, cultural infrastructure

Traffic and Transportation

Planning for infrastructure and facilities for transport

Regional Roads and Energy

Hierarchy of Roads: *National, State, District, Other District Roads, and Village Roads*:

Standards, provision and institutions involved. Investment, pricing and maintenance; Access, Coverage and conditions; National, State and District Policies towards Roads; National Highway Project: Golden Quadrilateral, North-South and East-West Corridors and its impact on regional space, PMGSY and its impact on village connectivity. BRDO: border roads and backward regions; Forward and Backward regions in terms of road provision; Conventional and Alternative Energy Sources and Policies and programmes towards energy at various levels. Demand and Supply projections, investment and pricing; Trans-boundary issues in production, sharing; privatization issues. Nuclear Energy: issues involved and probable spatial impact.

References:

1. 'Managing Urban Water Supply' by E. Gathe Donald, Billings, R. Bruce, Buras, Nathan, Dordrecht, Kulwer Academic Press
2. 'Water of India' by G.K. Ghosh, A.P.H. Publishing Corporation
3. 'Water Problems and its Management' by SatishYadav, Hope India Publications
4. 'Urban Water Supply Handbook' by W'Mays Larry, McGraw Hill Handbook
5. 'Urban Drainage' by David Butter, David Butter & John W. David Spon Press
6. 'Basic Environmental Technology: Water Supply, Waste Disposal & Pollution Control' by J.A. Nathanson, P.E. John Wiley and Sons, N.R. Brisbane, Prentice Hall
7. 'Municipal Solid Waste Management' by N.N. Bandela, D.G. Tare, B.R. Publishing
8. 'Manual on Municipal Solid Waste Management, The Expert Committee Gol, MoUD, CPNEEO 2000 Managing Solid Waste in Developing Countries' by J.R. Holmes, John Pub, John Wiley & Sons
9. 'CPHEEO Manuals on Water Supply, Sewerage, Drainage and Solid Waste Management', by CPHEEO, CPHEEO
10. 'Improving Municipal Solid Waste Management in India', by Da Zhu, P.U Asnani and Chris Zurbrugg; World Bank Publications
11. 'Unleashing the Potential of Renewable Energy in India', by Gevorg Sargsyan, Mikul Bhatia, Sudeshna Ghosh Banerjee, Krishnan Raghunath and Ruchi Soni; World Bank Publications
12. 'Report of Working Group on Road Transport', by Working Group on Road Transport for 12th Plan, Planning Commission

SUBJECT: METROPOLITAN CITY AND REGIONAL PLANNING

Subject Code: 01201154

Focus: To study the Growth of Metro and Mega Cities and their relationship with their respective Regions; and spatial planning approaches for their Planned Development.

Content:

Urban Growth and System of Cities

Growth of cities scale, complexity and its impact on national development, cities as engines of growth, cities as ecosystems, resources in cities

City – Region Linkages

City, fringe and the periphery - physical and functional linkages, peri-urban development

Metro and Mega Cities: Problems and Issues

Growth trends and processes, characteristics, problems, concepts and concerns of urban sustainability, issues related to diversity and unintended growth, economic, social and environmental sustainability, quality of life, inclusivity and equity, climate change, transit oriented development, participatory planning. Inner city – issues and problems, approach to development

Human Settlement Planning, Urban Development Policies and Programmes

Concepts, approaches, strategies and tools; Policies and programmes at various levels, impact on metro and mega city development.

Concepts and Typology of Regions and Regional Dynamics

Basic Concepts in Regions, Defining a region: fluidity and purposiveness, Typology of Regions: Resource Regions, Mega, Macro, Meso, and Micro Regions; Regional Dynamics: Growth of Mega and Metro Regions: Scale, Complexity and its impact on national and international scenario, convergence and divergence. Regional Economy, competitiveness among regions, backward and leading regions in development; Special Regions: SEZ, Agro Regions, Ecological regions, etc.

Regions in India and Its Planning

Regions in Indian Context: Resource Regions, Corridors as regions, National, subnational and State as a region, macro, meso and micro regions in India. Case Studies from India: NCR and Delhi Mega Region, Mumbai Mega Region, Kolkata Metro Region, Chennai Metro Region, and other Metro Regions in India.

Tools and techniques available for planning regions in India; Role of 73rd and 74th Constitution Amendment Acts in regional plan preparation and implementation

References:

1. 'City and Metropolitan Planning and Design' by ITPI,ITPI
2. 'Urbanization and Urban Systems In India' by R. Ramchandran, Oxford University Press
3. 'Indian Metropolis: Urbanization, Planning and Management' by V. K. Bawa, Inter – India Publications
4. 'Madras 2011: A new Perspective for Metropolitan Management' by MMRDA, MMRDA
5. 'Regional Plan 2021' by NCRPB, NCRPB
6. 'Master Plan for Delhi 2021' by DDA, DDA
7. 'Million Cities of India (Vol. 1&2)' by R.P. Misra and K. Misra, Sustainable Development Foundation
8. 'An introduction to Development and Regional Planning: With Special Reference to India', by Jayasri Ray Chaudhuri, Sangam Books Ltd.

SUBJECT: ELECTIVE - I

INCLUSIVE URBAN PLANNING

Subject Code: 01201180

Focus: To study the various Forms, Arenas and Uses of Inclusion in the Processes of Urban and Regional Planning.

Content:

Understanding Inclusive Planning

Definitions and components

Stakeholders Profile and Needs, Access to Shelter, Services and Livelihoods

Urban Poor, Informal Sector, Gender, Children, Elderly, Disabled, Displaced people, etc.; Slums - dimensions, causative factors, determinants, location characteristics of settlements; Informal sector - growth, characteristics, functions, economic contributions, linkages with formal sector, impact on Urban Development

Participatory Planning Process and Policies, Programmes and Legislation

Methods, role of stakeholders (including civil society organizations), etc.; Related Acts, Five year plans, policies and programmes at various levels

Planning interventions

Inclusive zoning, development and building regulations, Slum Improvement

References:

1. 'The Illegal City: Space, Law and Gender in a Delhi Squatter Settlement' by A. Datta, Ashgate
2. 'Worlding Cities: Asian Experiments and the Art of Being Global' by A. Roy (Editor) and A. Ong (Editor), Wiley Blackwell
3. 'Unequal Networks: Spatial Segregation, Relationships and Inequality in the City' by G.V. Ejik, IOS Press
4. 'Antinomies of Empowerment: Observations on Civil Society, Politics and Urban Governance in India, Economic and Political Weekly' by J. Harris

PLANNING FOR TOURISM

Subject Code: 01201181

Focus: To study the Role of Tourism in Urban and Regional Planning.

Content:

Introduction to Tourism

Definitions, scope, nature, classification and dimension, tourism as an industry, tourism in developed and developing world

Tourism Sector – impacts

Relationship between Tourism and Urban Development, Tourism multiplier and forecasting methods: capacity building and carrying capacity planning for tourism projects, tourism and cultural and social change: Socio-cultural problems, environmental degradation.

Planning for Tourism

Nature and scope of a tourism plan- key issues and stages, data requirements, surveys, role of key players / stake holders in tourism policy and planning, sustainable tourism development planning; community planning and tourism; implementation and management, role of travel and tourism promoting agencies, monitoring the tourism development; Tourism marketing - concept, techniques and strategies.

Policies and Programmes

Tourism policies at various levels

References:

1. 'Tourism: Principles, Practices, Philosophies' by R. Charles, J. Goeldner and R. Brent Ritchie, John Wiley & Sons.
2. 'Tourism Development in India' by A. Satishbabu, APH Publishing Corporation

SUBJECT: ELECTIVE - I

URBAN HERITAGE CONSERVATION AND MANAGEMENT

Subject Code: 01201191

Focus: To develop Understanding with relevance to Sustainable Urban Heritage Conservation.

Content:

Introduction to Urban Heritage

Typology / classification, inventories, mapping; Human habitation in historical context; Heritage as a motivating force in sustainable urban conservation and development

Heritage Conservation

Natural heritage conservation - typologies, policies for conservation, regulatory measures, community participation; Concept of Historic Urban Landscapes; Built heritage conservation - determinants of built form on heritage; Historic urban infrastructure and traditional water harvesting systems. Integration of historic monuments / areas / cores / urban systems in the developmental process and land use, regulatory measures and community involvement; Intangible cultural heritage and development: issues, conservation strategies. Preparation of conservation and heritage management plans.

Heritage and Tourism, Policies and Programmes, Legislation

Cultural and heritage based tourism - nature, potential and prospects, marketing aspects; Acts and laws recognizing conservation / regeneration; Heritage toolkit; Implications of 74th Constitution Amendment Act

Design in Human Habitation

Social / cultural / ecological / energy determinants of design; Imaginability of the city; Structure of urban spaces – location criteria of activities and urban uses; Urban Regeneration, renewal, rehabilitation, revitalization, reconstruction and redevelopment - concepts, interventions, processes, approaches and methods, tools.

References:

1. 'Cultural Tourism and Sustainable Local Development' by Luigi Fusco Girard (Editors) and Peter Nijkamp (Editors), Ashgate
2. 'Urban Revitalization : Perspectives and Initiatives' by Nirmala Rao Khadpekar, ICFAI
3. 'Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice' by Richard Longstrength (Editor), University of Minnesota Press
4. 'Urban Planning Conservation and Preservation' by Naoum Cohen, McGraw-Hill
5. 'Historic Cities and Sacred Sites: Cultural Roots for Urban Futures' by Ismailb Serageldin (Editor), Shluger Ephim (Editor), Martin Brown Joan (Editor), The World Bank

DISTRICT PLANNING AND RURAL DEVELOPMENT

Subject Code: 01201192

Focus: To study District Planning with Integration of Rural and Urban Development Initiatives, Policies and Programmes.

Content:

Introduction

Decentralized Planning in India – Historical perspective: Current Scenario – Recent Development in decentralized district level planning. 73rd and 74th Constitution Amendment Acts, Participative District Planning; Role of Planning Commission and Finance Commissions, and ICT in District Planning.

District Planning

Data Management and District Level Visioning, Institutional and other support for District Planning Committee, Bridging gap through district planning, resource mapping and determination of funding sources, consolidation of urban and rural plans; Multi-Sector and multi-level integrated approach to planning (vertical and horizontal spatial integration); Rural-Urban spatial relationship; District Development Plans – Guidelines for District Planning: Content and context and methodologies, Village Development Plans – an Integrated approach, rural norms and standards (spatial). Capacity Building for Decentralized Planning; Democratizing Information: using media for district development.

Rural Development - I

Introduction: Meaning and Scope and overview of rural development: Historical perspective – Rural Development Programmes in India. Problem / perception and identification; Rural Area Planning – Programmes / Policies / Schemes for rural development, their coverage and outcomes; Rural Infrastructure Development: Bharat Nirman – A business plan for rural infrastructure, Rural Building Centers, PMGSY, IAY, Rajiv Gandhi Technology Mission, Central Rural Sanitation Programme, PURA.

Rural Employment Schemes: Mahatma Gandhi National Rural Employment Guarantee Act, 2005, Sampoorna Grameen Yojana, National Food for work programme, Swarna Jayanti Gram Swarozgar Yojana, National Social Assistance Programme.

Programmes: Command Area Programme, Drought Prone Area Programme, Backward Area Development Programme, North Eastern Development Programme.

Technology Missions: Water, Sanitation, etc.

Rural Development - II

Changing Profile of the Rural areas of India: Consumption pattern changes, land utilization changes, cropping pattern changes, holding size change, living standard changes, changes in asset ownership – its implication in the planning process;

Rural Settlement Analysis: Types, activity, environment and economic interface in rural habitat, technology in rural settlement; Land

Utilization: Types of land utilization and its relevance to planning; Land conversions and its regulation / facilitation in peri-urban areas;

Land utilization analysis; Common property and its use, tenancy and ownership, holding size and its relevance, irrigated and non-

irrigated and land values; Sources of information for land information; Technology in Rural Development: ICT in rural development,

Rural Information system, Weather forecasting, disaster minimization, market information, etc. E-Panchayats, energy-efficient

technologies and alternative technologies; Inclusive Development: Special Component Plan - Tribal Sub Plan and Weaker Sector Plan

allocation, implementation, monitoring and evaluation; North Eastern Plan.

References:

1. 'Panchayati Raj, From Legislation to Movement' by George Mathew, Concept Publishing Co.
2. 'Constitution (73rd Amendment) Act 1992' by GOI, GOI
3. 'Constitution (74th Amendment) Act 1992' by GOI, GOI
4. 'Manual of Integrated District Planning' by Planning Commission, Planning Commission
5. 'Various Five Year Plans (1st to 12th)', by GOI, Planning Commission
6. 'Kollam Perspective Plan' Government of Kerala, Department of Town & Country Planning, Thiruvananthapuram
7. 'Rural Development in India: A Public Policy Approach' by S. Maheshwari, SAGE
8. 'People's Knowledge, Participation and Patronage' by B. Cokke (Editor) and U. Kothari (Editor), ZED Books

LAND MARKETS AND MANAGEMENT

Subject Code: 01201193

Focus: To study Land Markets and Land Management Techniques.

Content:

Land Economics, Land Policy and Land Markets

Economic Principles of Land use, Concept of Rent and its application. Demand forecasting for land, factors affecting land supply and demand; Market Conditions – formal and informal, legal and illegal; Instruments of land policy and impact on markets: Planning instruments, market development instruments, financial development instruments, fiscal instruments, and other supportive instruments:

Market by Government and Government by Markets: Regulation, monopoly power and its use, private development, rent-seeking and its impact on land supply, access to land by various segments of population, and PPP in land.

Supply Side Management

Property Rights: ownership, user and exchange rights: Its implication on land supply, Land Development: Type, cost, methods of disposal. Corruption and land markets: Corruption, black money and land markets; Relation between land, share and gold markets.

Regulation in Land Markets: Social justice and land distribution: public domain, social-democratic regulation and corporatist regulation, collective action of the state and regulation of its supply of land – overall impact of regulation on land prices: Master Plan, Zoning and other planning regulations and their impact on supply.

Land Management Techniques: Private land assembly, co-operatives in land development, FDI in land development, land pooling and plot reconstitution, Transfer of development rights, land sharing and land lease.

Demand Side Management

Income elasticity of land, business cycles and its impact on demand for land, externalities and internalities in land development and induced demand, economic growth and demand for land; Changes in tastes and preferences and its effect on type of land; Poor and their demand; Physical, fiscal, financial and legal incentives for inducing or restricting the demand for land; Mega investments and its effect on land.

Land Pricing and Real Estate Markets

Land valuation techniques, land pricing, subsidies, auctions; type of development: plotted, flat system, and their effect on land pricing. Hedonistic pricing, land price behaviour in urban centres; constructing the land price index; Market Conditions – real estate cycles, market efficiency, market forecasting, Cartels, collusion, and rent seekers in real estate market, agents in real estate markets, risks; Real estate regulatory bill and its likely impact.

Land Information System (LIS): Land records in rural areas (examples from Karnataka, Andhra, etc), transparency in land transaction, methods of publicizing land prices and land price monitoring.

References:

1. 'Urban Land Economics' by Jack Harvey and Jowsey Ernie, Macmillan Publications
2. 'Sustainable Land Management Sourcebook' by World Bank, World Bank Publications.