Informal settlements & social inclusion: experience of undergraduate planning education

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Informal Settlements in Indian Cities
Impulses for Innovation in Architecture and Urban Planning
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INFORMAL SETTLEMENTS & SOCIAL INCLUSION: EXPERIENCE OF UNDERGRADUATE PLANNING EDUCATION

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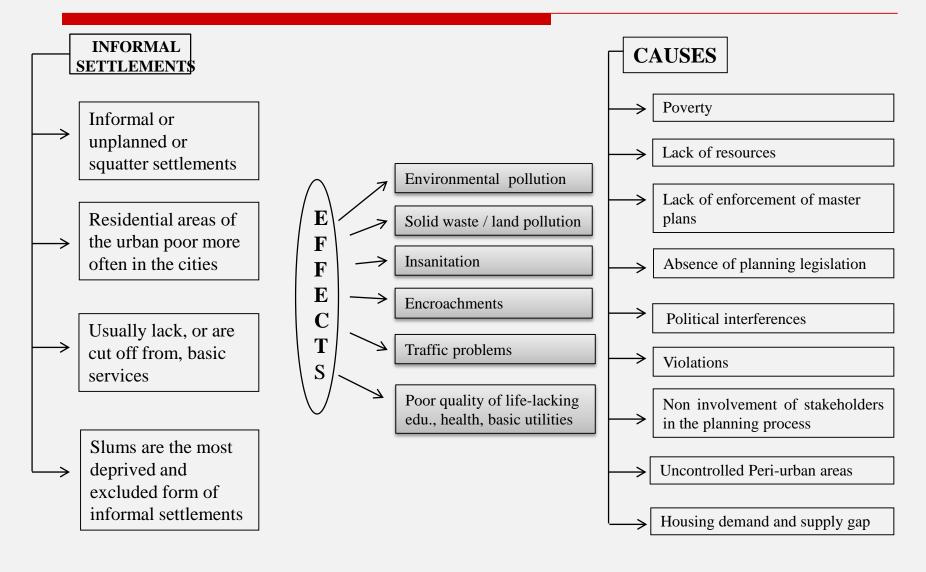


LAY OUT OF PRESENTATION

- 1. INFORMAL SETTLEMENTS & SOCIAL INCLUSION
- 2. GROWTH OF PLANNING SCHOOLS IN INDIA
- 3. GURU RAMDAS SCHOOL OF PLANNING, GURU NANAK UNIVERSITY, AMRITSAR
- 4. UNDERGRADUATE COURSE AND INFORMAL SETTLEMENTS
- 5. INTERACTION: LEARNING AND FEEDBACK
- 6. CONCLUSIONS



INFORMAL SETTLEMENTS





SOCIAL INCLUSION

•SOCIAL INCLUSION MEANS PROVISION OF BASIC INFRASTRUCTURE (WATER SUPPLY, SEWERAGE, DRAINAGE, ELECTRICITY), ADEQUATE HOUSING, HEALTH FACILITIES, EDUCATION FACILITIES AND EMPLOYMENT.

• "SOCIAL INCLUSION ENSURES THAT PEOPLE HAVE A VOICE IN DECISIONS WHICH AFFECTS THEIR LIFE AND THAT THEY ENJOY EQUAL ACCESS TO MARKETS, SERVICES AND POLITICAL, SOCIAL AND PHYSICAL SPACES." World Bank.



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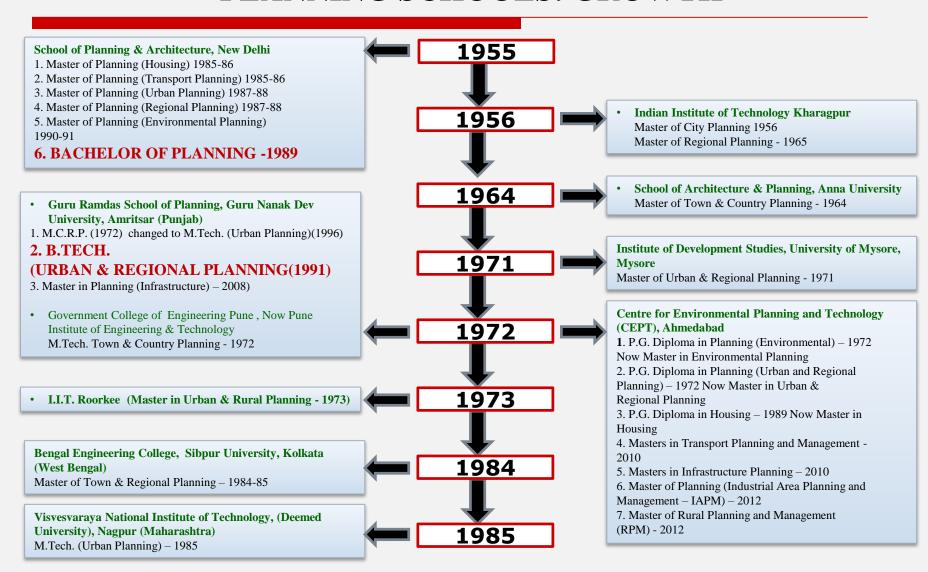


A BEGINNING....

- THE SCHOOL OF PLANNING AND ARCHITECTURE DELHI HAD A MODEST BEGINNING IN 1941 AS A DEPARTMENT OF ARCHITECTURE OF DELHI POLYTECHNIC.
- •LATER AFFILIATED TO THE UNIVERSITY OF DELHI AND INTEGRATED WITH THE SCHOOL OF TOWN AND COUNTRY PLANNING WHICH WAS ESTABLISHED IN 1955 BY THE GOVERNMENT OF INDIA TO PROVIDE FACILITIES FOR RURAL, URBAN AND REGIONAL PLANNING.
- RENAMED AS SCHOOL OF PLANNING AND ARCHITECTURE IN 1959.
- •RECOGNIZING THE SPECIALIZED NATURE OF THE FIELDS IN WHICH THE SCHOOL HAD ATTAINED EMINENCE, IN **1979**, THE GOVERNMENT OF INDIA, THROUGH THE THEN MINISTRY OF EDUCATION AND CULTURE, CONFERRED ON THE SCHOOL OF PLANNING AND ARCHITECTURE THE STATUS OF "**DEEMED TO BE A UNIVERSITY**".
- ■IT WAS RECOGNIZED AS "AN INSTITUTE OF NATIONAL IMPORTANCE UNDER AN ACT OF PARLIAMENT" IN 2015.

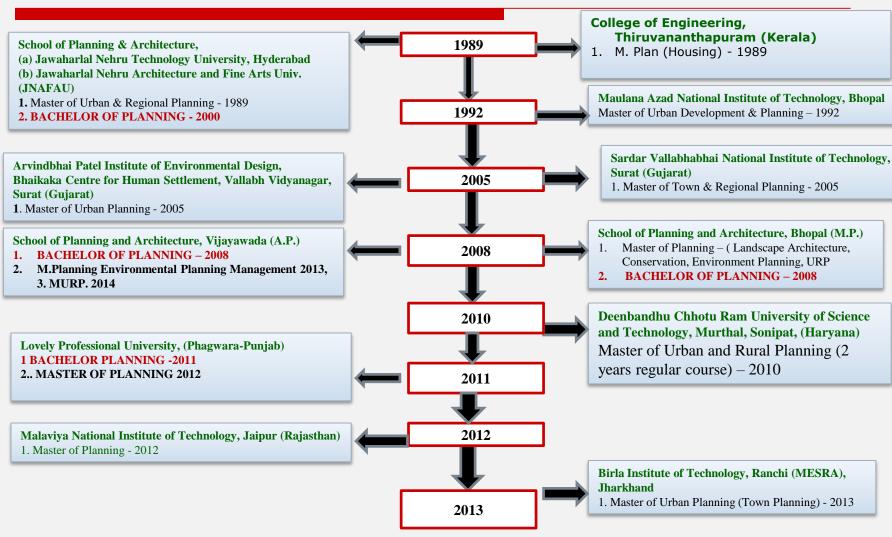


PLANNING SCHOOLS: GROWTH





PLANNING SCHOOLS.....



ONLY SIX SCHOOLS ARE IMPARTING UNDER GRADUATION EDUCATION IN INDIA. NETWORKING OF ALL SCHOOLS IS NEED OF THE DAY.



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GURU RAMDAS SCHOOL OF PLANNING

- •Master of City and Regional Planning 1972 {seats 10+5 sponsored from field:Total 15 }(discontinued after 24 years in 1996)
- •B.Tech (Urban and Regional Planning) 1991 { Seats 40 AICTE} Second in India to start this course.
- •M.Tech (Urban Planning) 1996 { Seats 10+5 Sponsored+8 GATE pass : Total 23}
- •Master of Planning (Infrastructure) 2008) offered by University Grants Commission (UGC) under its Innovative Programmes Scheme {Seats 15+5 sponsored: Total 20}
- •Ph.D Programme students pursuing 11.



RESEARCH AND CONSULTANCY

- City Development Plans
- Zonal Development Plans
- Regional and Block Development Plans
- Environment Improvement Programmes
- Transportation Studies and Solutions
- Infrastructure Planning and Management
- Planning and Design of Residential, Commercial and Other Areas
- Redevelopment, Conservation of Heritage and Urban Rehabilitations Studies
- Town Planning Capacity Building Programmes



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- i. M.Tech (Urban Planning)
- ii. Master of Planning (Infrastructure)
- iii. B.Tech (Urban & Regional Planning)



M.Tech (Urban Planning) 2013-14

Semester I	Semester II	Semester III	Semester IV
1. History of Urban Planning Thought 2. Principles and techniques of Urban Planning 3. Urban Transportation Planning 4. Computer Applications and Computer aided designs Planning Practice: 1. Survey and Presentation Technique	1. Urban Planning Legislation 2. Urban economics and Real estate 3. Urban Planning Information System Elective 1. Urban Landscape Planning and Design 2. Planning for Urban Utilities 3. Basics of Architecture and Building Construction 4. Urban Design and Conservation Planning Practice II: 1. Master Plan Internship (6 Weeks_	1. Urban housing and community development 2. Urban project management 3. Planning research and Models Elective 1. Metropolitan Planning and Development 2. Urban Governance 3. Urban Environment Planning and Management 4. Planning for Informal Sector Planning Practice: 1. Site Planning of an urban area 2. Preparation of a DPR Educational Tour	*Student may opt a credit based undergraduate course from any Department of the University.



B.Tech (Urban and Regional Planning)

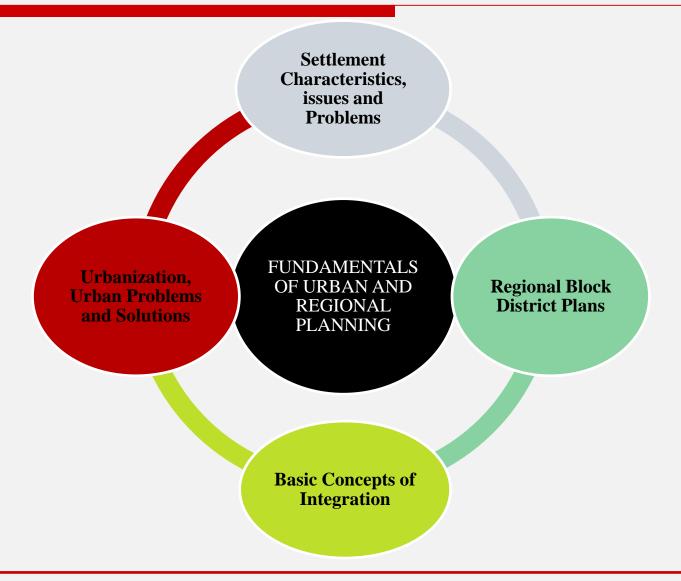
Semester I

1998-99	2009-10	2013-14	
 History of Human Settlements-I Elements of Geography Architectural Design-I Visual and Technical Drawing-I Building Materials and Construction-I Planning Practice: Local visit and Report Writing-I 	1. Introduction to Urban & Regional Planning 2. Techniques of Planning 3. Social & Demographic Considerations in Planning 4. Building Materials 5. Architecture & Design* Punjabi - I / Punjab History & Culture – I Planning Practice: Map Reading & Scales (8 weeks) Preparation of Maps (8 weeks)	Core: 1.Fundamentals of Urban and Regional Planning 2.Techniques of Planning 3.Social and Demographic Considerations in Planning 4.Elementary Architectural Design 5.Punjabi Compulsory/Basic Punjabi 6.Communicative English-1 Planning Practice: 1.Map Préparation 2.Map Graphics	

Remarks: Keeping the feedback from field, teaching,, students and experts necessary additions and alteration made from time to time. Theory papers reshuffled to link with planning studio



FUNDAMENTALS OF URBAN AND REGIONAL PLANNING







Survey techniques

SOCIAL AND DEMOGRAPHIC CONSIDERATION S IN PLANNING

Social components of Settlements

Planning Norms & Standards Basic concepts of sociology and demography



PLANNING STUDIO

Map Preparation

- Elements
- Components
- Presentation

Map Graphics

Techniques of Presentation



ADOPTING LATEST TECHNOLOGY















Semester II

1998-99	2009-10	2013-14
 History of Human Settlement-II Elements of Geology Architectural Design-II Visual and Technical Drawing -II Building Materials and Construction-II Planning Practice Local Visit and Report Writing-II 	 Principles of Planning Geographical Considerations in Planning History of Human Settlements – I Building Structure & Construction Computer Basics & Applications Punjabi - II / Punjab History & Culture – II Communicative English – II Planning Practice: Visual & Technical Drawing (6 weeks) Survey of a Locality (10 weeks) 	 Principles of Planning Evolution of Human Settlements Elements of Buildings Geographical considerations in Planning Punjabi Compulsory/ Basic Punjabi - 2 Communicative English -2 Planning Practice: Survey of Locality Computer Aided Design (CAD)

REMARKS: For deep understanding of informal areas, survey of locality was introduced in 2nd semester in 2009-10 and CAD introduced to help to digitize map of the locality under study.





Planning Approaches

EVOLUTION OF HUMAN SETTLEMENTS

History of growth and development of settlements

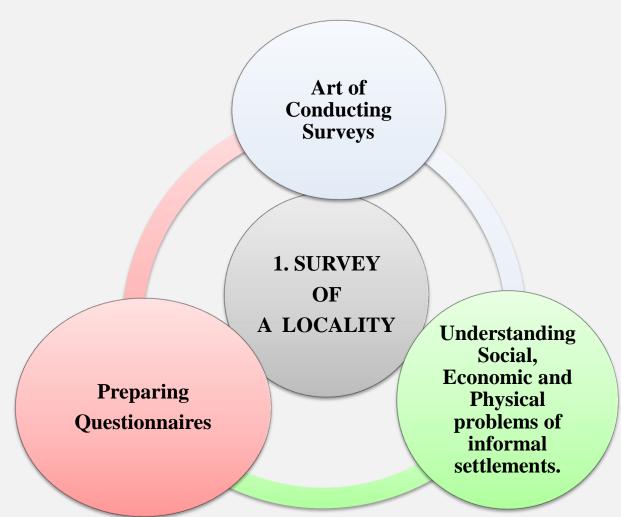
Principle concept of city planning
Norms and
Standards

Form and structure of settlements

Geographical Considerations in Planning - Relevance of Geographic considerations in settlements.



PLANNING STUDIO 1 and 2



2. Computer Aided Design: To train for preparing base maps



Semester III

1998-99	2009-10	2013-14
 Techniques of Planning-I Elements of Statistics Computer Application-I Surveying-I Elements of Structure Design Planning Practice: Survey of Locality 	 Housing Traffic Engineering & Planning History of Human Settlements - II Planning for Utilities Surveying - I* Environmental Studies Planning Practice: Computer Aided Design (6 weeks) Residential Site Planning (10 weeks) 	Core: 1. Housing 2. Transportation Planning –I 3. Planning for physical infrastructure 4. Landscape Planning 5. Environmental Studies Planning Practice: 1. Site Planning :I (Neighborhood planning and cluster design) *Student may opt a credit based undergraduate course from any department of university.

Remarks: For rehabilitation of slum dwellers, training of planning of residential areas made part of studio. Housing is kept in 3rd sem to understand the informal housing linking with studio.



HOUSING

- Housing Typology
- Concepts of Residential areas and slums

TRANSPORTATION PLANNING -I

- Traffic Characteristics
- Traffic Surveys
- Traffic controls and Regulations

PLANNING FOR PHYSICAL INFRASTRUCTURE

• Basic infrastructure in Settlements

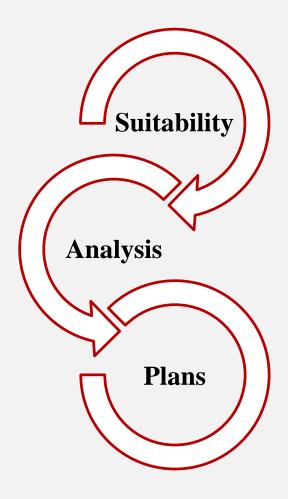
LANDSCAPE PLANNING

- Landscape components
- Relevance in informal and formal settlements



PLANNING STUDIO

SITE PLANNING (Neighbourhood planning and cluster design)



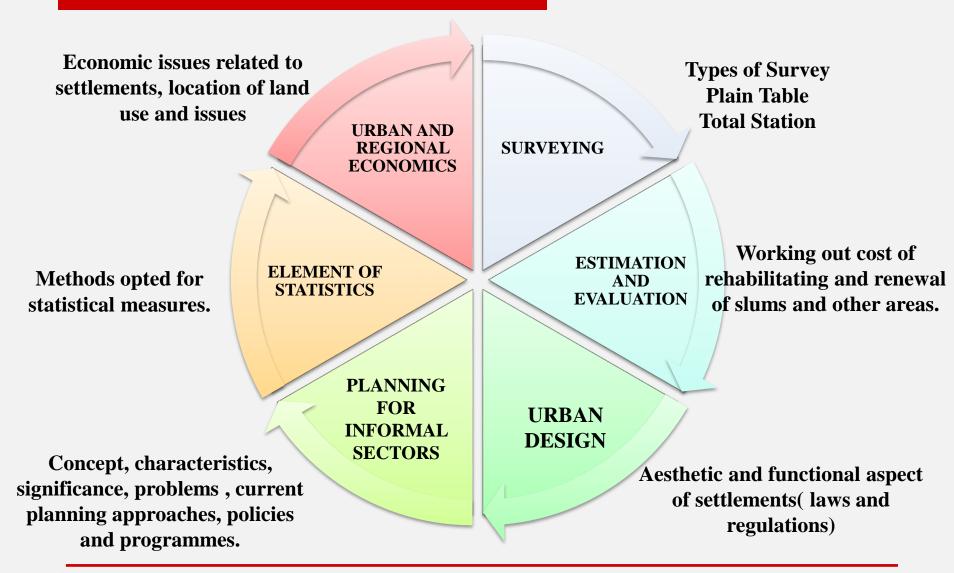


Semester IV

	1998-99	2009-10	2013-14
1. 2. 3. 4. 5. 6. Pla 1.	Techniques of Planning- II Elements of Economics Computer Applications- II Surveying-II Model Making Photography anning Practice: Study of An Area Redevelopment	 Landscape Planning & Design Urban & Regional Economics Plan Preparation & Implementation Estimation & Valuation Surveying - II* Planning Practice: Planning of Non-Residential Area (9 weeks) Applications of GIS (7 weeks) 	 Urban and Regional Economics Urban Design Surveying Elective: 1.Element of Statistics 2.Estimation and Evaluation 3.Planning for Informal Sector Planning Practice: 1. Site Planning - 2

Remarks: In Planning Studio Training For Non Residential Sites Covered. Informal sector here refers to informal activities in settlements.







Semester V

1998-99	2009-10	2013-14
 Principles of Planning-I Planning for Utilities Landscape Design Elements of Sociology and Demography Environmental Science Planning Practice Neighbourhood and Cluste r Planning Redevelopment of An Area 	Rural Settlement Planning & Development Planning Legislation Ecology & Environmental Planning Urban Design Planning Practice: Study of a Town (9 weeks) Preparation of Town Development Plan (7 weeks)	Core: 1. Planning for Conservation 2. Aerial Photography & Remote Sensing 3. Transportation Planning – II Elective: 1. Planning for Mega Projects 2. Planning for Tourism 3. Real Estate Management Planning Practice: Planning Studio – V (GIS & Urban Study)
		Educational Tour – I

Remarks: Aerial Photography & Remote sensing to train for understanding and interpretation of areas and land-uses of settlements. Conservation introduces in this semester to link with urban study.

Education tour to practically take students to different towns and cities



Basic concepts of redevelopment renewal and conservation.

Historic informal

settlements

Study and integrating conservation in urban planning process.

urban PLANNING FOR CONSERVATION

AERIAL
PHOTOGRAPHY
& REMOTE
SENSING

Basic concepts
Satellite imagery
Image interpretation and analysis
Application in land use studies.

PLANNING FOR TOURISM Transportation Planning – II

Urban transport system and urban structure.
Multi modal transport system
Norms standards



PLANNING STUDIO

GIS

Digitization

Study of a Town

Importance of comprehensive planning process, understanding Problems of Informal Areas

Preparation of Maps

Development perspective of the city in holistic manner



Semester VI

1998-99	2009-10	2013-14
 Principles of Planning-II Housing Traffic and Transportation Planning Urban and Regional Economics Environmental Planning Planning Practice: Design of a District Centre Study of a Town Internship 	1. Urban & Regional Transportation Planning 2. Planning for Rural Infrastructure 3. Project Formulation, Monitoring & Evaluation 4. Planning for Special Areas Planning Practice: 1. Preparation of Zonal Development Plan (6 weeks) 2. Preparation of Urban Development Project (10 weeks)	Core: 1.Planning Legislation 2.Metropolitan Planning & Development 3. Rural Settlement Planning & Development Elective: 1. Planning for Socio-Economic Infrastructure 2. Disaster Management 3. Planning for Special Areas Planning Practice: 1. Planning Studio – VI (Master Plan & Regional Study)
		Internship (4-5 Weeks)

REMARKS: Socio economic infrastructure is a specific paper for informal settlements.



Legislation related to urban planning and development of settlements

PLANNING LEGISLATION Planning measures, techniques for migratory population. Issues and problems.

METROPOLITAN PLANNING AND DEVELOPMENT

Disaster management methods/techniques in settlements

DISASTER MANAGEMENT PLANNING FOR SOCIO-ECONOMIC INFRASTRUCTUE

Relevance of infrastructure in settlements; master plan, slums, etc.



PLANNING STUDIO

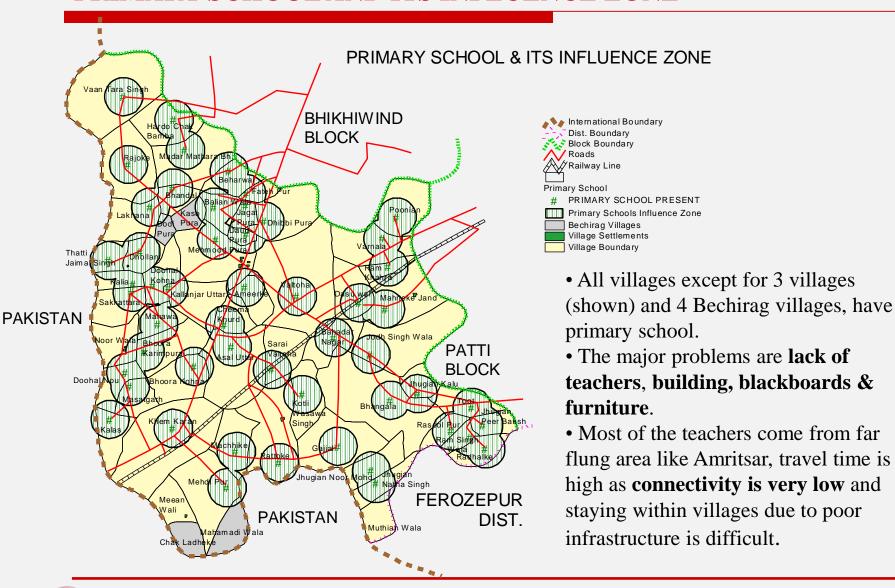
Master Plan
Comprehensive
perspective for future
planned growth.

Regional Study Comprehensive study of regional aspects (Block level)

EXAMPLE OF **COMPREHENSIVE BLOCK PLAN** IS SHOWN TO UNDERSTAND NEED TO EMPHASIZE ON SOCIAL INCLUSION TO CHECK UNNECESSARY MIGRATION

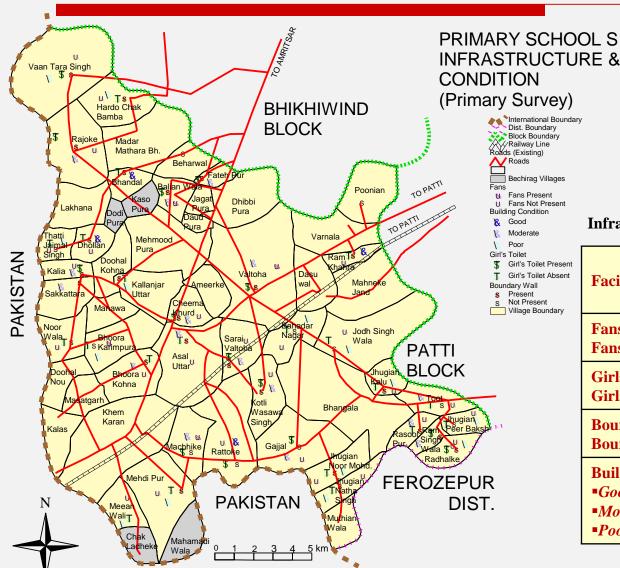


PRIMARY SCHOOL AND ITS INFLUENCE ZONE





PRIMARY SCHOOLS: INFRASTRUCTURE SCENARIO



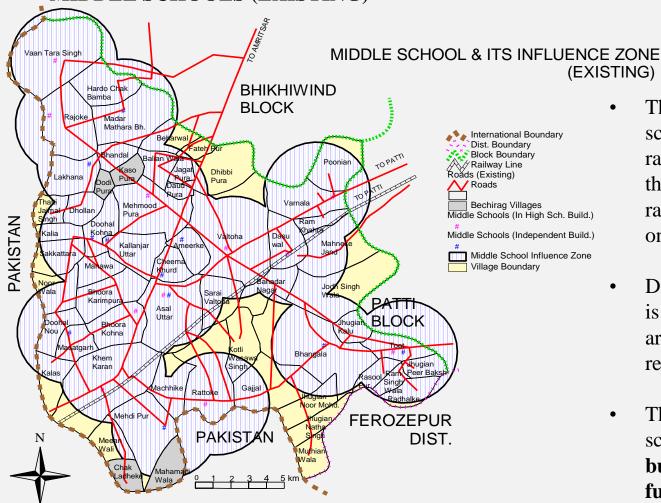
Infrastructure Situation in Primary Schools

Facilities	No. of Primary Schools	%age
Fans present	4	12.1
Fans not present	29	87.9
Girls Toilet Present	15	45.5
Girls Toilet not present	18	54.5
Boundary Wall Present	22	66.6
Boundary Wall not present	11	33.4
Building Condition Good Moderate Poor	5 15 13	15.1 45.5 39.4



SOCIAL SECTOR (EDUCATION): MIDDLE

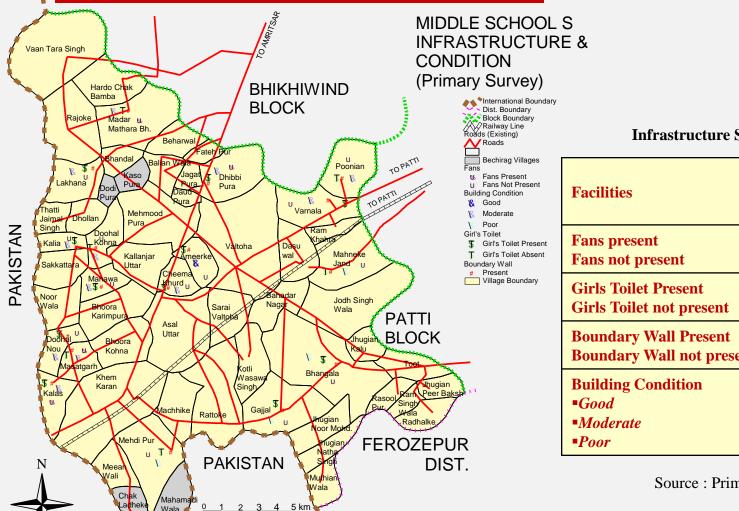
MIDDLE SCHOOLS (EXISTING)



- The standard for middle schools influence zone is 6 km radius, but considering it more the school influence zone radius shown in the map is only 3 km.
- Distribution of middle schools is not uniform and certain areas (as shown in map) remain unserved.
- The major problems in middle school is lack of teachers, building, blackboards and furniture



MIDDLE SCHOOLS: INFRASTRUCTURE SCENARIO



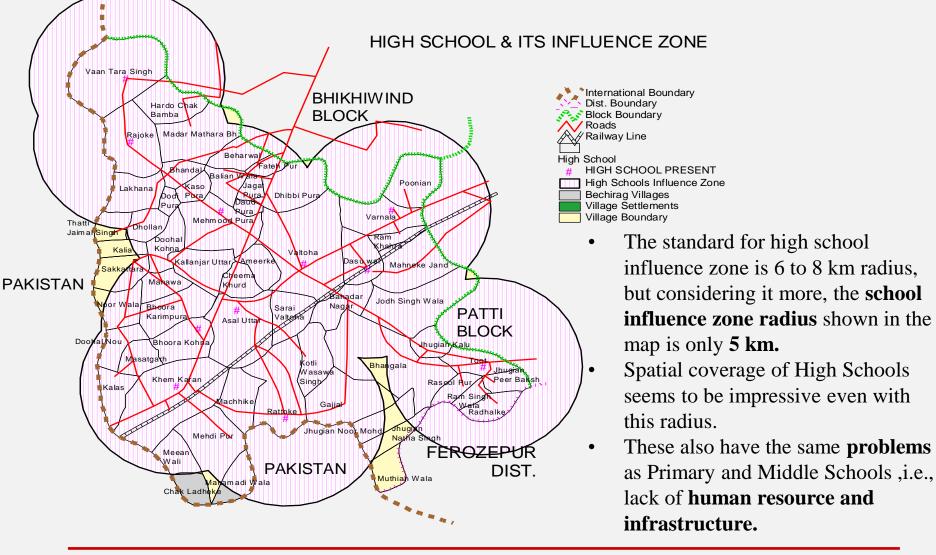
Infrastructure Situation in Middle Schools

Facilities	No. of Middle School	%age
Fans present Fans not present	4 13	23.5 76.5
Girls Toilet Present Girls Toilet not present	11 6	64.7 35.3
Boundary Wall Present Boundary Wall not present	17	100
Building Condition Good Moderate Poor	1 12 4	6.0 70.5 23.5

Source: Primary survey June-July, 2007

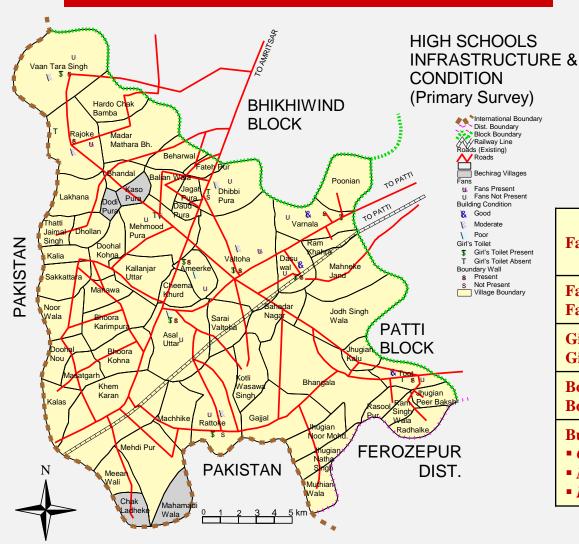


HIGH/HIGHER SECONDARY SCHOOLS





HIGH/HS SCHOOLS: (INFRASTRUCTURE SCENERIO)



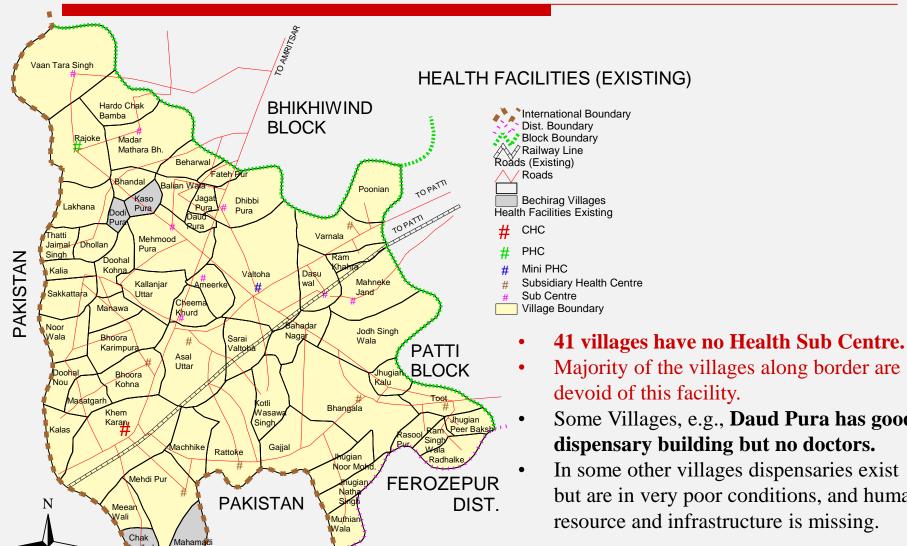
Infrastructure Situation in High Schools

Facilities	No. of High Schools	% age
Fans present Fans not present	2 9	18.0 82.0
Girls Toilet Present Girls Toilet not present	7 4	63.6 36.4
Boundary Wall Present Boundary Wall not present	8 3	72.75 27.25
Building Condition Good Moderate Poor	3 5 3	27.25 45.5 27.25

Source: Primary survey June-July, 2007



HEALTH FACILITIES (EXISTING)

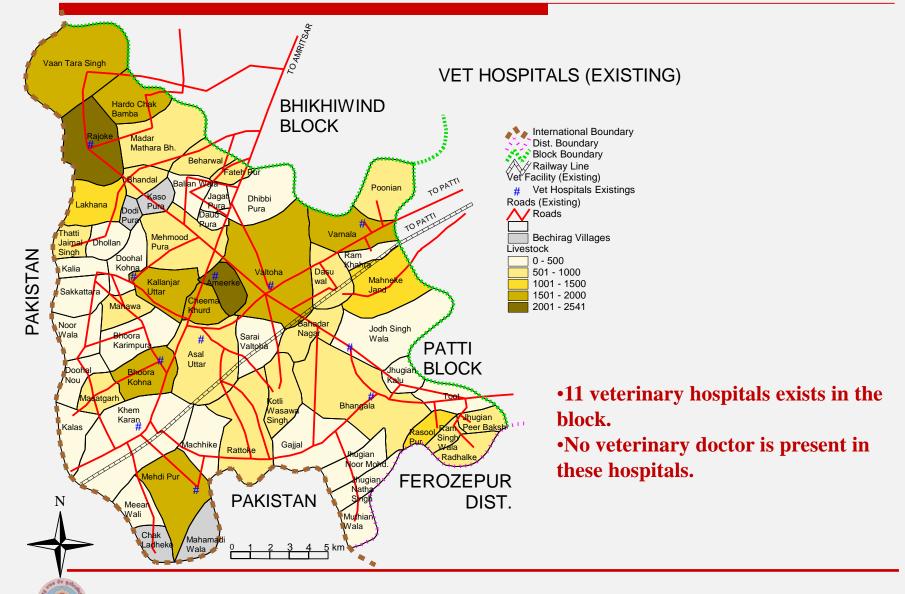


dispensary building but no doctors.

In some other villages dispensaries exist but are in very poor conditions, and human resource and infrastructure is missing.



VETERINARY FACILITIES



Semester VII

1998-99	2009-10	2013-14
 Regional Planning Specifications Estimation and Valuation Project Formulation Monitoring and Evaluation Professional Practice Public Finance Planning Practice Town Development Plan Regional Study Regional Plan 	 Planning for Conservation & Redevelopment Regional Planning Professional Practice Planning Practice: Preparation of a Regional Plan (10 weeks) Preparation of a Village Plan (6 weeks) Planning Project Preliminaries 	Core: 1.Regional Planning 2.Environment Planning & Management 3.Project Formulation, Monitoring & Evaluation Elective: 1. Professional Practice 2. Community Development and Public Participation 3. Development Policies and Strategies Planning Practice: Planning Studio-VII (Regional Plan & DPR)
		Educational Tour – II

REMARKS: Education tour is of informal areas in metropolitan cities as a good practical exposure to understand problems and strategies.



Environmental issues and planning strategies.

ENVIRONMENT PLANNING & MANAGEMENT Professional ethics, code of conduct.
Role and responsibility.

PROFESSIONAL PRACTICE

DEVELOPMENT POLICIES AND STRATEGIES

Institutional regulatory mechanism, study of different policies housing, transport etc.

COMMUNITY
DEVELOPMENT
AND PUBLIC
PARTICIPATION

Community, organizations, public participation and planning process.



PLANNING STUDIO

Regional Plan
Balanced Regional
Development

DPR
Understanding of costing
and phasing of projects.



Semester VIII

1998-99	2009-10	2013-14
 Developmental Management Planning Legislation Urban Design and Conservation Metropolitan Planning and Development Rural Planning and Development Planning Practice: Planning Project 	 Land Management Development Management, Policy & Finance Metropolitan Planning & Development Planning Practice: Planning Project (16 weeks) 	Elective: 1.Governance and Finance 2.Planning for Regional Infrastructure Planning Practice: Planning Studio – VIII (Planning Dissertation) *Student may opt a credit based undergraduate course from any department of university.

REMARKS: Governance and Finance deals with the hierarchal structure followed while implementing the projects and also provides information regarding the financial aspect of the projects in settlements.



Planning Dissertation (Areas of Research)

- 1. Housing
- 2. Urbanization & Urban Development
- 3. Utilities & Services (Infrastructure)
- 4. Environment
- 5. Development Plan, Master Plan & ULB
- 6. Industrial
- 7. Traffic & Transportation
- 8. Conservation and Redevelopment
- 9. Special Areas
- 10. Tourism & Recreation
- 11. Policies, Programmes & Schemes
- 12. Commercial
- 13. Regional Planning & Development



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Interaction Learning Feedback



Field and Teaching AICTE



Prof,Dr D.S. MESHRAM PRESIDENT ITPI



INTERACTIONS USEFUL FOR REVIEWING COURSES



Representatives Planning schools



Chief Town Planners, Punjab



Faculty & Students Commissioner MC



Melbourne co professionals



LEARNING THROUGH INTERACTION



VISIT OF FACULTY & STUDENTS :PAKISTAN



FACULTY: UET LAHORE, PAKISTAN



FACULTY & STUDENTS SPA, NEW DELHI



FACULTY & STUDENTS SURAT



INTERACTION & EXPOSURE



WITH FACULTY
PLANNING SCHOOL CHENNAI



WITH LT GOVERNOR PUDUCHERY



WITH GOVERNOR CHENNAI



INTERACTIONS EXPOSURES



FACULTY IN SPA CHENNAI



SPA B.PLANNING STUDENTS



STUDENTS IN JAIPUR



FACULTY WITH OUTGOING BATCH





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CONCLUSIONS

- 1. CURRICULUM COVERS ISSUES AND PROBLEMS OF INFORMAL SETTLEMENTS IN VARIOUS THEORY SUBJECTS SUCH AS HOUSING, SOCIAL AND DEMOGRAPHIC CONSIDERATIONS, TRAFFIC AND TRANSPORT, ESTIMATION AND VALUATION, INFORMAL SECTOR, COMMUNITY PARTICIPATION AND THE LIKE.
- 2. THE PRACTICAL EXPOSURE OF INFORMAL SETTLEMENTS IS GIVEN IN THE FORM OF STUDIO EXERCISES KNOWN AS PLANNING PRACTICE. THE MOST RELEVANT RELATED TO THE TOPIC ARE SURVEY OF A LOCALITY, TOWN STUDY AND PLAN.
- 3. ANOTHER METHOD OF COVERING THE TOPIC IS THROUGH EDUCATIONAL TOURS TO HISTORIC AND METROPOLITAN CITIES.
- 4. FURTHER SPECIAL LECTURES ARE BEING ORGANIZED OF PROFESSIONALS FROM FIELD AND TEACHING FOR ADDING THE ADDITIONAL INPUT.
- 5. DUE TO CREDIT BASED CONTINUOUS EVALUATION SYSTEM, ALL EVALUATION IS INTERNAL. DUE TO THIS THE INPUT FROM PROFESSIONALS IS RESTRICTED IN PRACTICAL EXERCISES INCLUDING THE THESIS.
- 6. IN ORDER TO OVERCOME THIS, INTERACTION OF STUDENTS AND FACULTY THROUGH LECTURES OF INVITED SPEAKERS, CONFERENCES, SEMINARS, INTERACTION WITH OTHER SCHOOLS, SUMMER TRAINING/ INTERNSHIP ARE SOME OF THE EFFORTS BEING ADOPTED. FURTHER, NEED TO CREATE NETWORKING AMONGST ALL INSTITUTIONS.
- 7. OVER ALL, THE SUBJECT OF INFORMAL SETTLEMENTS AND SOCIAL INCLUSION IS WELL COVERED WITH INNOVATIVE METHODS (MULTI MEDIA, SEMINARS, ASSIGNMENTS, TOTAL STATION IN THE CURRICULUM AND IS PROVING USEFUL IN THE FIELD.



THANKS

