



Chandigarh was designed by Le Corbusier in 1951 for a maximum population of 500.000 residents, following a highly planned urban model with self-sufficient, well-defined sectors. However, the current population of the city exceeds 1.200.000 residents, more than double its original capacity and with 20% of it's population living in slums.

With accelerated growth, projections suggest that by the year 2050, the population will reach 2.500.000 residents, posing significant challenges to sustainability and the preservation of the city's original design.

#### 1. Current Situation & Problems:

- a. Overpopulation: Chandigarh faces increasing density, putting pressure on its original urban design, which was intended for a much smaller population.
- b. Overcrowding: Older sectors and unplanned peripheral areas are becoming saturated.
- c.Limited Resources: Insufficient water supply and outdated waste management systems.
- d. Inefficient Mobility: Reliance on private cars and underdeveloped public transport systems.
- e. Social Fragmentation: Self-sufficient sectors reduce interactions between communities.

### 2. Desired Future & Goals for 2050:

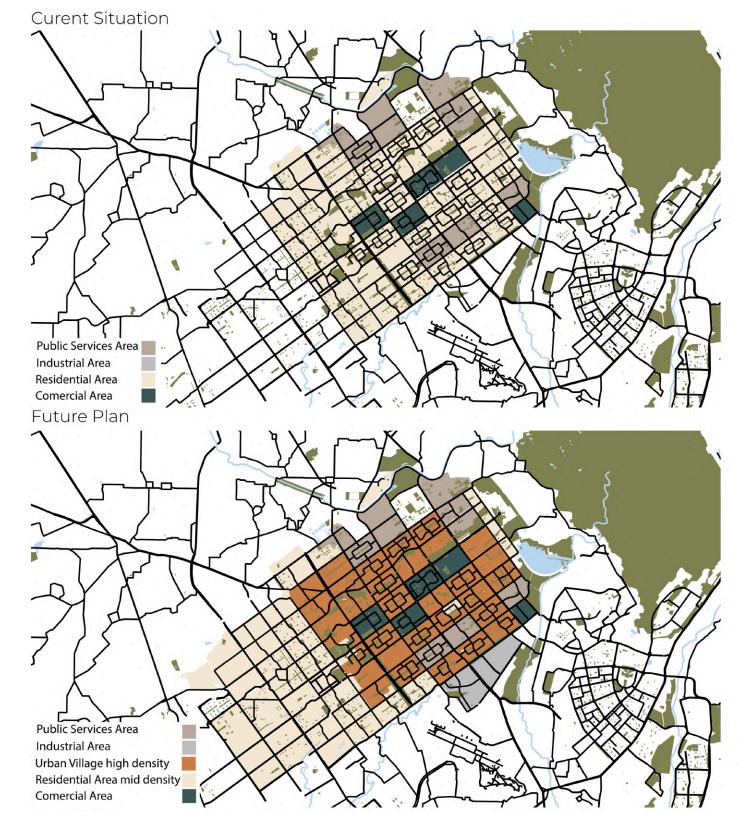
- Create a sustainable and resilient city integrating technology, community, and ecology.
- Maintain a balance between urban growth and preserving Le Corbusier's design.
- Promote greater social interaction between sectors and with peripheral cities.

# • Ensure social inclusion with equitable access to housing, water, and transportation.

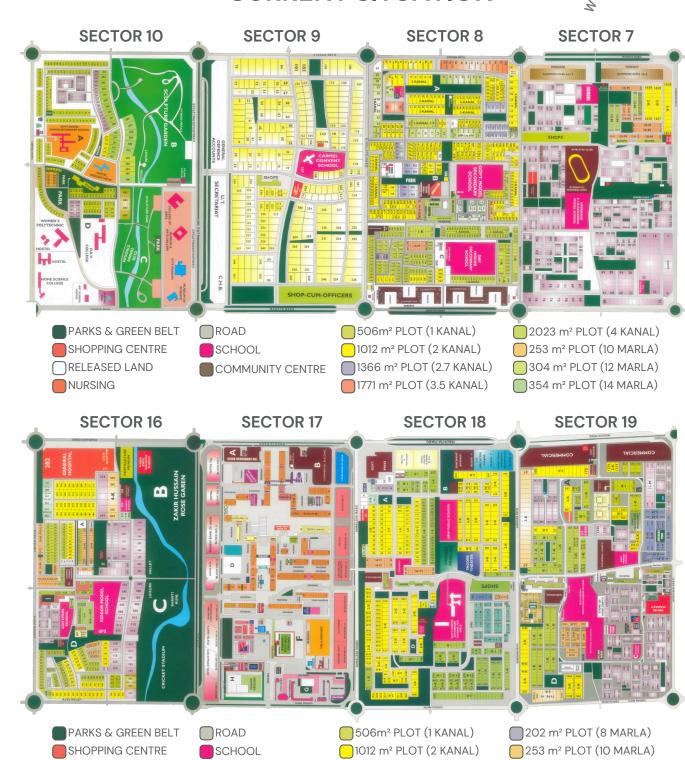
- 3. Gaps Between Current Situation and Desired Future. Key Differences: a. Infrastructure: The city lacks efficient mass public transport networks for the projected population.
  - b. Public Spaces: A need to redesign plazas, parks, and communal spaces to enhance interaction between sectors.
  - c. Resource Management: Absence of advanced water recycling and waste management systems.
  - d. Social Cohesion: The self-sufficiency of sectors limits inter-community interaction.
  - e. Expansion Capacity: Peripheral areas are not integrated into the original master plan.

# 4. Key Actions to Achieve the Desired Future. Proposed Strategies:

- a. Redensification: Transform low-density sectors into multi-family housing zones with mixed uses.
- b. Sustainable Mobility: Develop a multimodal public transport system (metro, bike lanes, electric buses).
- c. Green Infrastructure: Expand parks and green corridors connecting sectors.
- d. Social Inclusion: Build affordable housing and shared community spaces. e. Water Management: Implement rainwater harvesting, wastewater treatment, and efficient resource usage.



# **CURRENT SITUATION**



#### 5. Barriers and Enablers:

#### Barriers:

RELEASED LAND

NURSING

- Resistance to change from residents.
- Limited financial resources.
- Lack of coordination among governmental bodies.

COMMUNITY CENTRE

#### • Enablers:

- Use of technology for planning and monitoring (smart cities).
- Support from sustainable public policies and collaboration with the private sector.

190 m<sup>2</sup> PLOT (7.5 MARLA)

304 m<sup>2</sup> PLOT (12 MARLA)

• Educational programs to raise awareness among the population about sustainability.

# 6. Roadmap to Reach the Desired Future:

# • Initial Phase (2025-2030):

- Pilot projects for redensification and public transport.
- Improve water and waste management systems.
- Develop a legal framework to protect the original design while adapting to new needs.

# • Expansion Phase (2030-2040):

- Scale up mobility and redensification projects.
- Integrate peripheral sectors with the central city through shared transport and services.
- Expand resource infrastructure and public spaces.

# • Final Phase (2040-2050):

- · Consolidate expansion with fully functional and connected sectors.
- Ensure economic, environmental, and social sustainability.

