

Architecture & Town Planning

Lecture 4: Urban Problems & Solutions

AR. ALINA BABAR

LECTURE, CIVIL DEPARTMENT

IQRA NATIONAL UNIVERSITY

alinababar1992@gmail.com

Urban Decay & Sprawl

Rapid city growth means rapid movement from city to suburbs.

It creates zones of decay in inner city & urban sprawl in suburbs.

The Doughnut effect

1. Development occurs around a central location, (CBD of city) and then is surrounded by residential, industrial. Etc.
2. Industry and jobs move to the suburbs leaving disused land in the CBD and that creates a hole.
3. The hole is an area of urban decay

Urban Decay

One of the biggest problems of towns today is the poor condition of the old inner city areas. These have run-down housing, closed factories and industries, pollution and vandalised, crumbling buildings, lack of open space .

The deterioration of the urban environment: It occurs when urban infrastructure falls into disrepair and buildings are left empty for long periods of time.

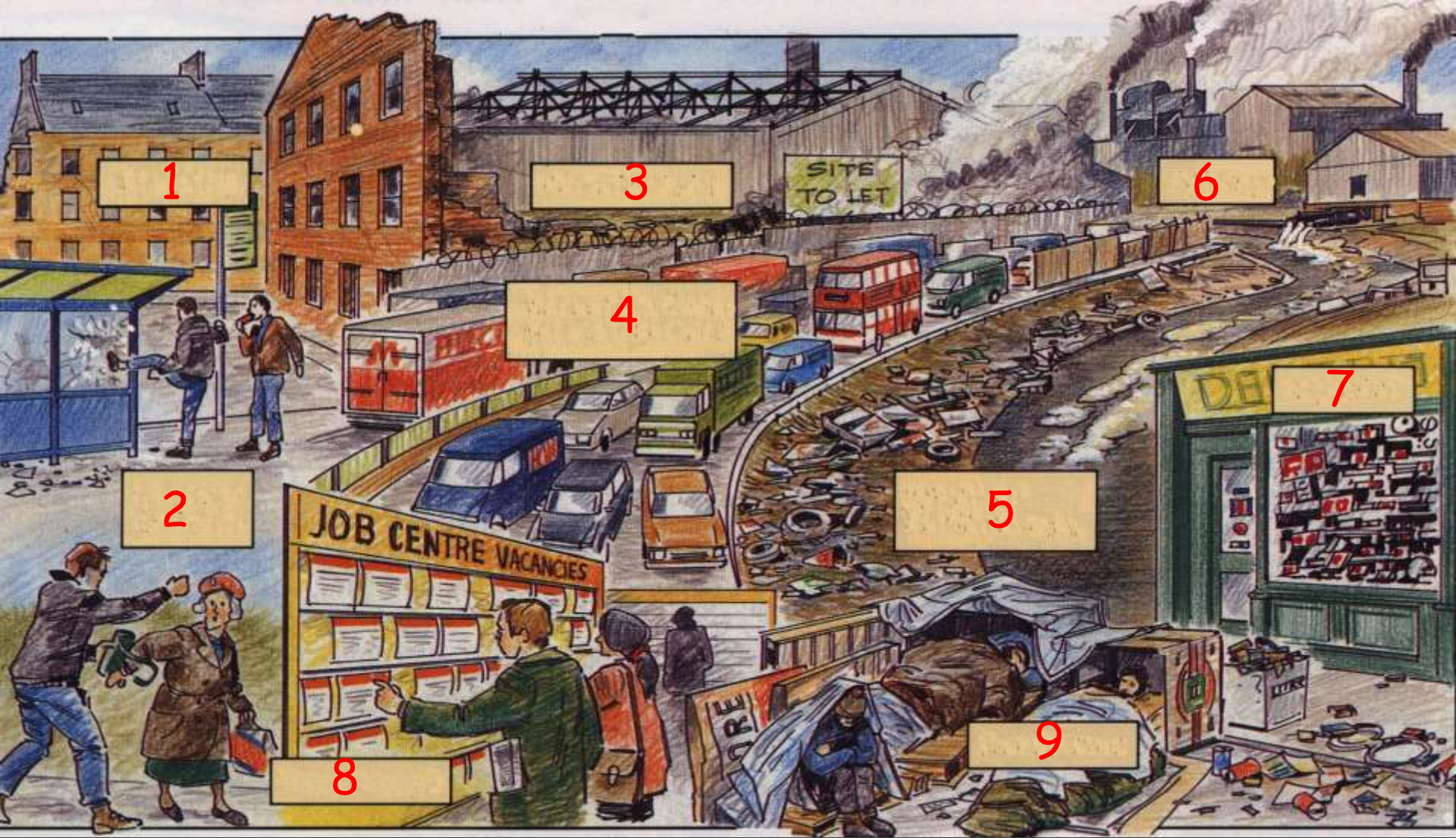
Lack of employ in factories as most have moved.

Poor living condition: Buildings are overcrowded and provision of facilities are sub-standard. Buildings are poorly maintained

Poor environmental conditions: Narrow streets, poor drainage, congestion

Poor pedestrian linkage system: Such as insufficient pavements, intrusive vehicular traffic & poor pedestrian network linking housing areas with commercial and community facilities.

Concentration of poor & immigrants: The poor conditions cause richer people to move out of the area, leaving low-income people and immigrants behind.



1 = Old housing

2 = Crime & Vandalism

3 = Disused factories

4 = Traffic congestion

5 = Litter and rubbish

6 = Pollution

7 = High Prices

8 = Unemployment

9 = Homelessness

Urban Sprawl

Large scale industry move to edge of city in industrial Estates with access & space thus attracting other settlement

Car ownership: Allows people to live away from work & facilities. It adds to city expansion. Expansion results in increased Housing demand in the suburbs & cities

Access to work: Daily commute & Lack of choice in ways to travel

Excessive land consumption takes over agricultural land. Fragmented open spaces, wide gaps between development and scattered appearance

Absence of communities: Entire inner city communities re-housed thus separating families, friends & generations and in turn created insecurity. Lack of public spaces and community centers

Low densities at peripheries in comparison with older centers

*People start
using cars*

*More cars,
more streets-
urban sprawl*

*Increasing
dependence on cars,
less use for public
transport*

*More use
of cars*

*Negative impact on
urban life quality,
congestion*

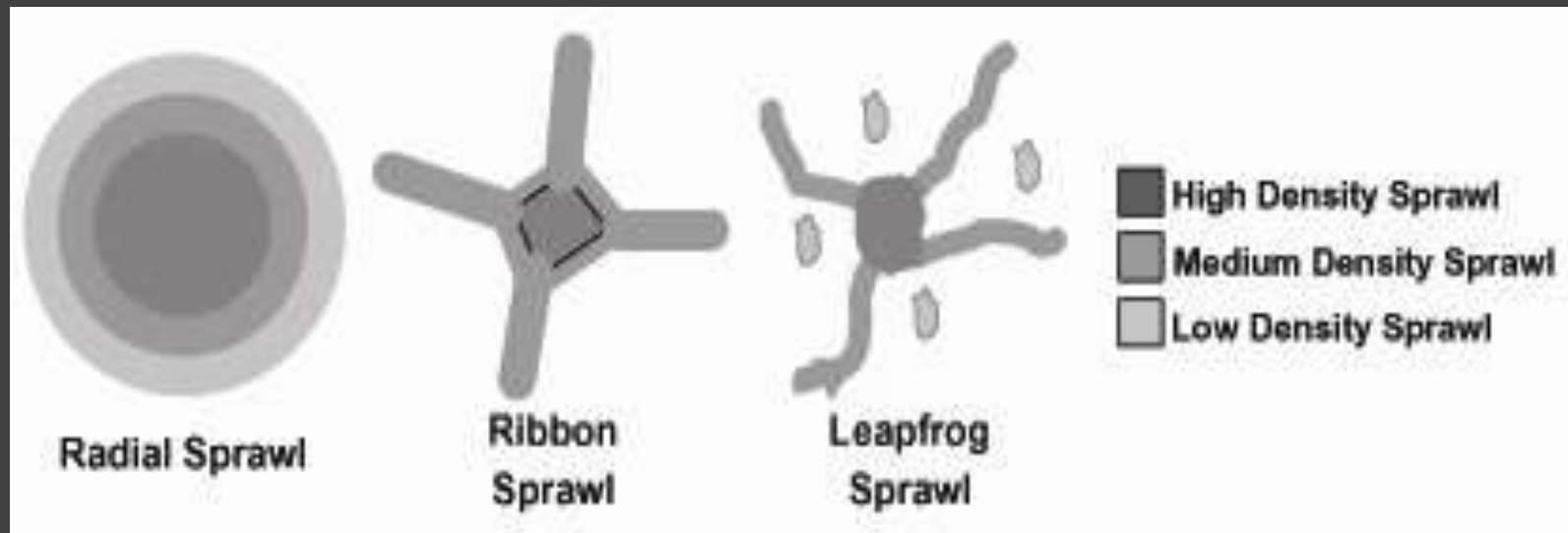
*People
move to the
suburbs*

Forms of Urban Sprawl

Radial sprawl

Ribbon development

Leapfrog development



Causes of Urban Sprawl

- Rapid rural-to-urban migration (Population growth)
- Lack of repair and maintenance
- Economic stagnation (Lack of growth)
- Natural disasters
- Rise in household income
- Subsidization of infrastructure (Money granted by the state or a public body for Infrastructure Development)
- Ineffective land-use & Poor land policies (Lack of zoning)
- Social problems in central cities

Effects of Urban Sprawl

- Increased infrastructure costs
- Increased Resource consumption (Energy, Water)
- Increased personal transportation costs
- Decrease in social capital (The network of relationship among people who live and work in a particular society)
- Loss of time
- Degraded surroundings
- Change in land-use pattern
- Tourism industry damage
- Delays in emergency medical services response times
- Increased Pollution
- Degraded Human Health
- Wasted Tax Money
- Loss in Open Space, Parks, Farmland and Wildlife Habitats
- Deforestation

Solutions against Sprawl

The push- and pull-factors for in-migrations to cities

Discourage the use of cars

More denser vertical growth

Mixed land-use

Brown field development (Previously developed land that is not currently in use)

From Sprawl to Slum

Types of Katchi Abadis

The katchi abadis are of two types:

Notified Kachi Abadis:

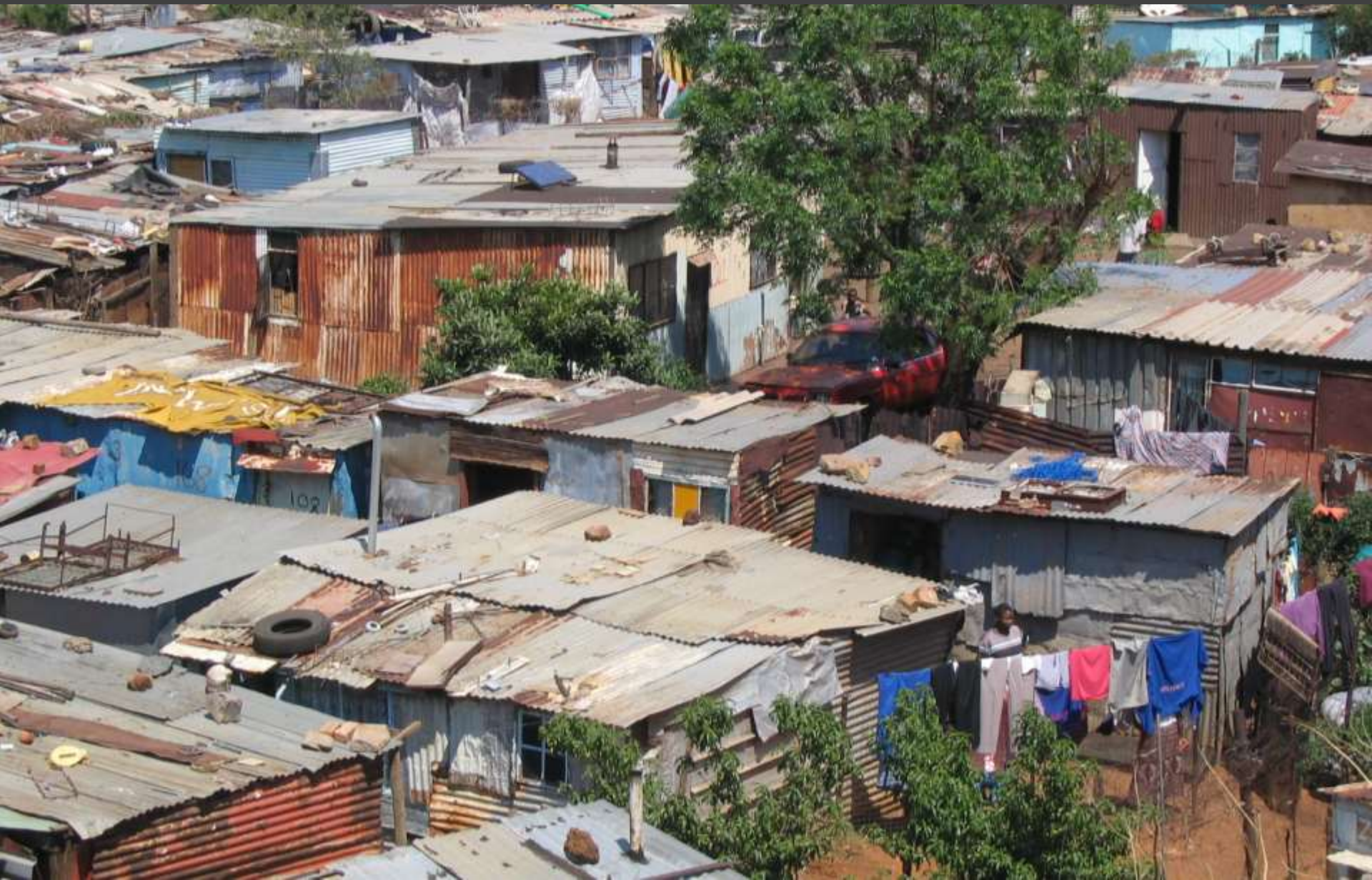
Settlements regularization through a 99-year lease and local government infrastructure development.

Non-notified Katchi Abadis:

Settlements not to be regularized because they are on valuable land required for development, or on unsafe lands.

Shanty Towns

The residences vary from shanty houses to professionally built dwellings



What are Slums?

- A Slum is a heavily populated (over crowded) urban informal settlement characterized by substandard housing, Poverty & Faulty arrangement of design
- These residential areas are harmful to safety, health and moral.
- It is an area with inadequate physical infrastructure such as road, street, drainage, sewerage, and no wastewater & solid waste management system
- It lacks reliable sanitation services, supply of clean water, reliable electricity, law enforcement, lack of light and ventilation and other basic services.
- Worldwide, there are approximately 1 billion people living in slums. However, that number is expected to rise to 2 billion by the year 2030.

Effects of slum

- Health and child mortality
- Disaster (Residing in Risky Areas)
- Working condition
- Risks of collapse, fire and landslides
- Environmental pollution
- Outbreak of diseases
- Visual pollution
- Family conflict and mental distress

Squatter Settlements

- A squatter settlement can be defined as a residential area which has developed without legal rights to the land and/or permission from the concerned authorities to build
- The people are living there illegally and do not own the land.
- As a result of their illegal or semi-legal status, infrastructure and services are usually inadequate.
- They provide housing for many of the world's poorest people and offer basic shelter.

Why do people squat?

- Daily wage/ low-income jobs (which in many cases are semi-permanent or temporary)
- High cost of land and other housing services;
- High "acceptable" building standards and rules and regulations
- Loop sided planning and zoning legislation.
- These reasons leave no option for the low-income householder to squat on a vacant piece of land.
- Lack of affordable housing for the urban poor
- Poor governance

Slums & Squatter Settlements in Pakistan

The three major slums in Pakistan

- Orangi town, Karachi is currently largest slum in Asia
- Parts of Machar colony
- Parts of Lyari town

Slums & Squatter Settlements in Peshawar

- Around 19 families of the Umerkhel tribe live in a squatter settlement in Chamkani area of Peshawar.
- An unchecked growth in various parts of the city, including Changarabad, Gulbahar, Ring Road, Nothia and Hayatabad.

UP GRADATION OF SLUMS

Slum Upgradation

- Slum upgradation means to improve the poor living standard by providing infrastructure of roads, streets, drainage, clean water supply and creating proper dumping point for solid waste.
- Access to education and health care are also part of upgrading.
- The main objective of slum upgrading is to alleviate the poor living standards of slum dwellers.
- Access to clean drinking water, sanitation, wastewater and solid waste management is also provided

Methods of Upgradation

There are two methods for slum upgradation

- **Complete Removal Method**

In this method, those houses and infrastructure which are in bad condition, unsafe and illegal are completely demolished and only those which are really in good condition are retained. Alternative sites are provided to the resident and they are shifted to those sites.

- **Gradual improvement method**

In this method instead of complete removal, those infrastructure which need maintenance are repaired to satisfactory level.

Barriers to Slum Upgradation/ Urban Renewal

- Insufficient legal and regulatory systems
- Excessive land regulation
- Corrupt, inefficient, or inadequate land registration systems
- Lack of political will around the issue

Slum Clearance:

- Require large amount of capital
- Require high technology level
- Disputes related to resettlement
- Acts of rebellious and violence taken by people being affected
- Difficulty in property resumption

Residents' objection

- Fear loss of their present business or jobs as they are often poverty-stricken
- The rent and living expenditure will be higher if they move out the region
- The aged residents want to preserve the social bonds and the neighborhood

Before and After Upgradation



SITE AND SERVICES SCHEME

A SOLUTION TO HOUSING PROBLEM

Introduction

- In order to relocate and rehabilitate the squatters, plots of land (SITE) either on ownership or land lease tenure, along with a bare minimum of essential infrastructure (SERVICES) needed for habitation are provided, and the beneficiaries have to, build their own houses on such land.

The Basic Principles

- The key components are the plot of land, infrastructure, and the house itself.
- Various inputs that go into them include finance, building materials/technology, and labor.
- The role of government agencies is only to prepare the land with certain basic infrastructure, which was to be sold or leased to the intended beneficiaries.
- The next step of actual house building was left to the beneficiaries themselves to use their own resources.

Variations in S&S Schemes

- They ranged from an empty plot of land and some services (like water, electricity and sanitation connections) to the provision of a "core" house (consisting of a toilet and kitchen only) on the plot of land with attached services.
- **Utility wall:** A "utility" wall is built on the plot which contains the connections for water, drainage, sewerage and electricity. The beneficiaries had to build the house around this wall, and utilize the connections from it.
- **Latrine:** Due to its critical waste disposal problem, many project provide a basic latrine (bathroom and/or toilet) in each plot.
- **Roof frame, core house:** The roof is the costliest component of a house and requires skilled labour to build. Therefore, some projects provide the roof structure on posts, and the beneficiaries have to build the walls according to their requirements.

CO-OPERATIVE HOUSING SOCIETY

A SOLUTION TO HOUSING PROBLEM

What is a Housing Cooperative?

- A housing co-operative is an association of people who collectively own and govern their housing on a not-for-profit basis.
- In such a cooperative, the membership is voluntary and control is democratic, and members make an approximately equal contribution to the capital required
- These societies are formed to provide residential houses to members.
- They purchase land, develop it and construct houses or flats and allot the same to members.
- Some societies also provide loans at low rate of interest to members to construct their own houses.

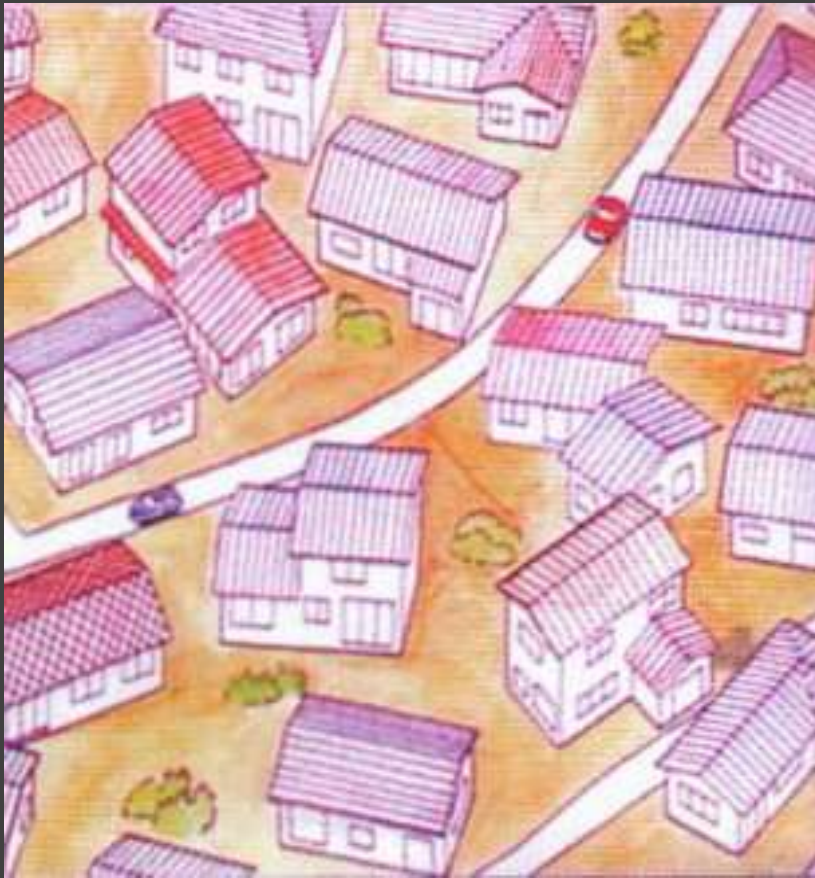
Types of Housing Cooperatives

Tenant Ownership Housing Societies: Under this category the land is held either on leasehold or freehold basis by societies, and houses are owned by members.

Tenant Co-Partnership Housing Societies: These housing societies hold both land or building, either on leasehold or freehold basis and allot flats to their members.

House Mortgage Societies: Such societies lend money to their members for construction of houses. The members have to make their own arrangements for building their houses.

House Construction or House Building Societies: Societies of this type spend money on behalf of the members for building the houses, and the houses are handed over to members when ready and the money spent is recovered as loan.



LAND POOLING

What is land pooling?

It is also known as land re-adjustment, replotting, land reassembly, parcellation, repartition.

Land pooling is a legal instrument for managing the urban development of urban-fringe lands

It is done when public funds for compulsory purchase and infrastructure provision may be lacking.

It is a technique by which public facilities in a certain area, such as roads, parks, and sewerage that are necessary for life, are created and/or improved, and individual sites are made easier to use and their site utility is increased by dividing them into more regular shapes.

Process of Land Pooling

The concept involves massing small parcels into a large parcel, provide it with infrastructure and return approximately 60 per cent of the redeveloped land to the owners after the development

Of the 40 per cent that remains with the local town planning or state government authority, a substantial portion is reserved for setting up infrastructure such as roads, hospitals, schools, parks, provide electricity, water, sewerage and such like.

The local planning or developing authority usually sells the rest for financing the costs for the infrastructure and amenities.

Urban Renewal

A SOLUTION TO HOUSING PROBLEM

Urban Renewal

Urban renewal (also called urban regeneration in the UK and urban redevelopment in the US) is a program of land redevelopment often used **to address urban decay in cities.**

Urban renewal is the clearing out of blighted areas in inner cities to clear out slums and create opportunities for higher class housing, businesses, and more.

Decayed parts of the city were demolished and rebuilt.

Initially referred to slum clearance and housing but has gradually evolved into a multidimensional concept

Urban renewal is often part of the **Gentrification process.**

Approaches

Redevelopment: The demolition of an existing building and its replacement by a new building. Restructuring the local road and transport network and open spaces to achieve social benefits. Also, for better utilization of land and improve the overall district environment and facilitate the community.

Rehabilitation: It acknowledges the need to change or add to a historic property to meet continuing or changing uses while retaining the property's historic character. It seeks to prevent the decay of the built environment by promoting and assisting the maintenance (Repair) and improvement of individual buildings by owners.

Preservation: It focuses on maintenance and repair of existing historic materials and retention of property's form as it has evolved over time. In other words, to retain and enhance unique culture and heritage. E.g. preservation of buildings with historical, architectural and cultural value and the retention of the local color and character of different districts.



Before Rehabilitation



After Rehabilitation

Preservation



Revitalization

Strengthen the design and quality of local features in run-down districts such as by turning streets into pedestrian districts with different themes.

