Chapter4: Urbanization & Environment

- Syllabus:
- Concept of urbanization
- Factors influencing urbanization
- Effects of urbanization
- Meaning of Migration
- Problems of Migration and Urban Environment
- Urban Heat Islands
- Smart Cities – Safe Cities: concept & meaning
- Sustainable Cities
- Review Questions

History of Urbanization

- Prehistoric time – Nomads, Transhumans
- Settled Agriculture since 5000B.C.-2000 B.C.
- Mesopotamia, Egypt, Greece,Indus valley,
- Came settlements like Hamlets, Villages-Rural
- Urbanization started with Towns, Cities, Metros, Megacities, Suburbs, CONURBATIONS, Megalopolis, EOPOLIS, NECROPOLIS
- Eg.of Megalopolis – Boston,Washington(D.C.) Mumbai,Pune, Delhi, Bangalore etc

Definitions

- 1)Merriam-Webster's Learners dictionary, "Urbanization is the process by which towns and cities are formed and become larger as more and more people begin living & working in central areas."

- 2)Sociologists – 'Urbanization is a population shift from rural to urban areas, into 'the gradual increase in the proportion of people living in urban areas'',and the ways in which each society adapts to the change.

Definitions continued……

- Geographical point of view – Urbanization may be described as the process by which humanity gathers into point locations or urban clusters rather than remaining thinly distributed over rural areas.

- Census of India -3 types of urban areas

- 1) All places with a municipality , corporation , cantonment board or notified town , area committee etc. are known as Statutory towns.

Census of India

- Census Towns – The places satisfying the following 3 criteria are treated as Census Towns.
- 1) A minimum population of 5000
- 2) At least 75% of male working population engaged in non- agricultural persuits
- 3) A density of population of at least 400 per sq. km.(1000 per sq. mile)
- Outgrowth – An urban agglomeration is a continuous urban spread constituting a town and its adjoining outgrowths(OGs), or two or more physically contiguous towns together with or without outgrowths of such towns.

Process of urbanization

- Ancient river valley civilizations- Mohenjodaro, Harappa, Lothal – urban centres which flourished

- It is the different for Developing as well as the developed world.

- In developed world this process is generative while in developing world it is a parasitic

Migration and its role in Urbanisation

- Migration is the permanent or semi-permanent change of residence of people from one place to another. The movement could be at the regional, national, or international level.

- Mostly a selective process with reference to age, sex, skill, education etc.

- Migration takes place because of no. of factors, but important among them are Push- Pull factors.

PUSH – PULL Factors in Migration

PUSH FACTORS:At village site

- Harsh physical Environment
- Natural Calamity
- Religious or Political reasons
- Climate Refugees
- Unemployment
- Resource Crunch
- No entertainment

Pull Factors- Attraction

- Attraction of place
- Good climate
- Safe environment
- Better Employment
- Good Education
- Entertainment
- Better living conditions

Effects of Migration on

A - Areas of origin

- 1) Loose Population
- 2) More older people-dependent
- 3) More females and children
- 4) More illiterate population
- 5) Less labour force
- 6) Lower income due to less productivity
- 7) More homogeneous
- 8) Underdeveloped
- 9) Empty areas

B - Areas of Destination

- 1) Gain population
- 2) More Younger people
- 3) Less females
- 4) More literate
- 5) More male labours
- 6) More income – high productivity
- 7) More heterogeneous-complex due to migrants
- 8) Developed
- 9) CROWDED

Urban Problems :Towns &Cities

- 1)Housing – slums, 65% live in Mumbai
- 2) Water supply & sanitation inadequate or less
- 3)Transportation is dense and complex
- 4)Education & Medical facilities
- 5)Waste disposal is a problem
- 6) Pollution of various types
- 7)Lack of open spaces & grounds
- 8)Lifestyle diseases : Diabetes, cancer, Heart diseases, B.P.
- 9)Social Evils – theft , murder, robbery, rape etc
- 10) Encroachment on natural & cultural heritage – kharland, mangrove,, beaches, forests , Open spaces ,etc

URBAN HEAT ISLANDS:(UHI)

- A heat island is a climatological concept which indicates an area of higher temperature surrounded by areas of lower temperature.

- Reasons – closely built up area, cemented roads leading to less percolation into ground, deforestation, industrial combustion, quarrying activities and domestic heat.

Factors Contributing to Heat Islands

- 1. Geographic Location: Continental, or portal
- 2.Weather: Wind and cloud
- 3.Time of day / season: UHI raise night time temperatures more than daytime temperatures.
- 4.City form:The type of constructions, the materials used in buildings , the amount of green space
- 5.Functions of city: Industrial or Pollution creator, amount of heat generated through transport, cooking , cooling agents in fridges, and in Air conditioners.

Impacts of Urban Heat Islands

- 1.It increases overall electricity demand in summer afternoons for running cooling systems, lights and appliances.

- 2.Because of the burden on power plants , the pollution of Sulphur Dioxide, Nitrogenoxide , Carbon Monoxide and particulate matter increase.

- 3.There are general discomfort to the people which is felt in increase of Blood Pressure, Heart Diseases, Respiratory difficulties, Heat cramps etc.

- 4.The heat creats the life of aquatic animals miserable.

Solutions to Urban Heat Islands

- 1.To paint the rooftops and pavements in white colour to reflect the heat back to atmosphere.

- 2.Creation of Green Roofs by construction of a garden or green space or planting trees on the roofs.

- 3. Planting trees on both the sides of roads or anywhere in the city space.

- 4.Creation of Green Parks in the city: Trees are known as the Green Lungs of city.

SMART CITIES

- A 'Smart City' is an urban region that is highly advanced in terms of overall infrastructure, sustainable real estate, communications and market viability. It is a city where information technology is the principal infrastructure and the basis for providing essential services to residents.

- This concept originated when the world was facing the worst economic crisis. In 2008, IBM began work on a 'Smarter Cities' concept as part of its Smarter Planet initiative.

- By 2009 ,it was known worldwide.

Smart cities …..

- The goal of a smart city is to transform the urban areas by implementing technological, economic and environmental changes for the betterment of citizens.
- There are 8 typical features of comprehensive development in smart cities described below.
- 1. Mixed Land use
- 2.HOUSING facility to all the citizens.
- 3. Reduction in congestion by good transport and walkable localities
- 4.Preserving Open spaces in form of parks, gardens, playgrounds
- 5. Transport options for all types of transport
- 6 Cost effective governance
- 7.Identity to city
- 8.Smart solution to infrastructre and services

The core infrastructure in Smart city

- 1. Adequate water supply
- 2.Assurd electricity supply
- 3.Sanitation including solid waste management
- 4. Efficient urban mobility and public transport
- 5. Affordable housing for poor
- 6.IT connectivity and digitalization
- 7.Good governance, and citizen participation
- 8 Sustainable environment
- 9. Safety and security of citizens
- 10. Health and education

SMART CITIES MISSION in India

- The Ministry of Urban Development, govt. of India took initiative and the P.M. Mr. Narendra Modi launched Smart cities Awas Yojana Mission in June 2015. This project was inagurated on 25th June 2016 in Pune, Maharashtra.

- Similarly , the AMRUT means Atal Mission for Rejuvenation and Urban Transformation also was initiated.

10 SMART CITIES IN THE WORLD

- Seoul in South Korea
- San Francisco in USA
- Hong Kong
- Singapore
- Rio-de Janeiro
- London - U.K.
- Stockholm
- Chicago
- Seattle
- Vienna

20 Smart Cities in India

- Bhubaneshwar, ODISHA   Davangere
- Pune   Indore
- Jaipur   Bhopal
- Surat   Ludhiana
- Kochi   Chennai
  Ahmedabad   Guwahati
- Jabalpur   Udaipur
- Vishakhapatanam   Belagavi
- Solapur   Kakinada
- Coimbatore   New Delhi