Chapter 15 - Urbanization

Social Studies 11

Introduction

- 1871
  - Men = life revolved around jobs
  - Women = life revolved around households and chores
  - Only 18.3% of Canadians lived in towns and cities

Introduction

- 1971
  - Most Canadians (76%) lived in towns and cities

Urbanization: Movement of people to cities

Introduction

- Most developed countries became urbanized during the 19th and 20th centuries
- This shift is mostly complete
- Now shifted to developing countries in Africa, Asia, and Latin America

Global Urbanization

- Causes of movement to cities
  - **Mechanization:** Machinery displaced workers in mining, fishing, logging, and especially farming
  - **Industrialization:** encouraged the concentration of manufacturing sites that had the right combination of raw materials, power, and transportation facilities
  - **Technological change in fuel sources:** from firewood to coal and then petroleum – meant that energy supplies could be hauled long distances to cities, to be consumed by the factories and workers housed there

Global Urbanization

- First countries to industrialize = first to urbanize
- Rate at which urban areas are growing is 1.5 times faster than world population growth!
- Births AND **in-migration** (people moving into cities)
- Globally, urban areas are growing at an average rate of 2.5% every year (about 3.5% in developing countries and 1% in developed countries)

Millionaire Cities

- In 1850, when only a part of the world was urbanized, just London, Paris, and Beijing had populations over 1 million

Millionaire Cities

- In 2000, 400 cities had over a million residents
- And now…

Rapid Urban Growth

- **Shanty Towns:** makeshift communities that have grown up around rapidly growing urban centres in developing countires
- **Built by** *squatters* on land they do not own from whatever building materials they can find

Rapid Urban Growth

- Demands of exploding populations put strains on water supplies, sewage facilities, mass transit, power grids, health and social services, policing, and fire protection
- Eg. Roadways are so crowded in Bangkok, Thailand that the average driver spends 44 days per year sitting in traffic

Plight of Street Children

- Estimated 100 million children live on the street world wide

Plight of Street Children

- In Sao Paulo Brazil they make up 10% of the city's population

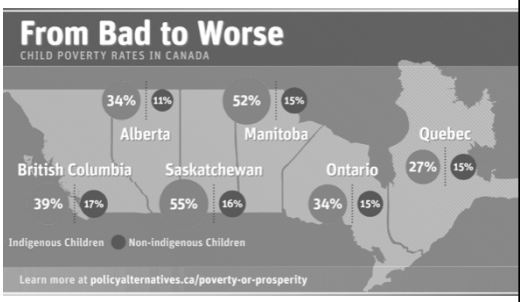
The Plight of Street Children

- Abandoned by families struggling with poverty
- Fleeing abusive homes
- Lacking job skills
- Turn to begging
- Shining Shoes
- Stealing
- Prostitution
- Often Victims of street violence, sexual predators or substance abuse
- In some countries police have murdered street children whom they see as a nuisance.

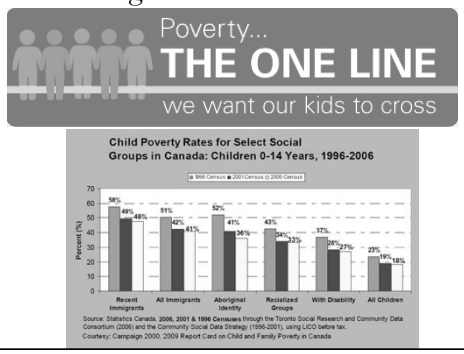
The Plight of Street Children

The Plight of Street Children

The Plight of Street Children

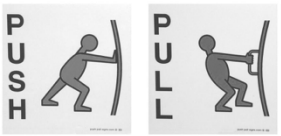


The Plight of Street Children



Function and Form in Cities

- **Push Factors:** encourage people to leave their rural homes and go to cities
- **Pull Factors:** attract people to cities
- **Urban Functions:** the activities and services that are provided by towns (ie. Cultural and financial services
  - Changes over time



Site and Situation

- **Site:** the physical characteristics of the land on which the city is built (landform, drainage, natural vegetation cover
  - Ie. Harbours, mountains, valleys, etc. (Richmond and the dyke)
- **Situation:** the relationship between the city and its wider surroundings (information about the population and economic patterns
  - Ie. Proximity to the border, transportation connections

Site and Situation

- If both remain favourable then the community will grow and prosper
- Vancouver has a **locational advantage** over Victoria because it is closer to raw materials, has a large harbour and land-based transportation systems and is directly linked to large cities in the US and other cities in Canada
- Some communities decline and even cease to exist because their sites and situations cannot sustain them (ie. Chief natural resource runs out or the location is farm from transportation routes

Analyzing Urban Functions

- **Basic Activities** (town-forming activities)
  - Industries such as mills, factories, and mines
  - Tourism, military facilities, public administration, transportation
  - Serve a larger population than just the community and bring wealth into the area
- **Non-Basic Activities** (town-serving activities)
  - Exist to meet the needs of the local population
  - Grocery stories, places of worship, municipal services such as parks
- **Multiplier effect** = earnings of workers in basic industries leads to expansion of the non-basic sector (ie. As more shops and services are provided (also works in reerse = job losses in basic activities produce even greater job losses in non-basic activities)

Analyzing Urban Functions

- Multiplier effect leads to unequal growth among different communities. Communities that have a locational advantage enjoy growth in basic activities and the multiplier effect produces even great employment in non=basic sectors
  - Toronto, Vancouver, Bombay, Cairo, Jarkarta = rapid growth
  - Seoul earns 24% of S. Korea's GNP
  - Bangkok generates 43% of Thailand's wealth

City Forms

- **Political and religious cities:**
  - Designed to serve important religious or political functions such as being the national capital or holy centre
  - Usually centred on a temple or place of great religious significance or important buildings

City Forms

- **Organic Cities**
  - Evolved quite naturally in ways that fit the physical landscape
  - Urban functions blend together with shops, homes and workplaces all close together
  - Rarely grow very large; good cities to walk around in

City Forms

- **Planned cities**
  - Designed to keep urban functions apart with separate places for homes, shops, and industries
  - Linked through transportation connections

City Forms

- **Transit cities**
  - Made up of sub-centres linked to a city core by transportation services

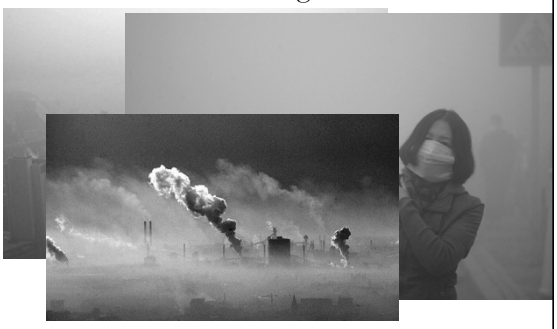
City Forms

- **Automobile Cities**
  - Expand outward in all directions from the city core
  - Roadways link the urban functions that are separated into distinct zones
  - Typically sprawl outwards for many kms, adding suburbs to the original city
  - Dominant form of cities in the world today

Automobile and the City

- Cars have allowed us to separate work, home recreation, and shopping
- Unfortunately also resulted in long commutes, daily traffic chaos, increased stress, polluted air, and petroleum shortages
- About 1/4of all the land in N. American cities is used for transportation activities with most paved over for roadways and parking lots
- Salt and oil-laden runoff from orads and parking lots washes into streams, damaging their ecosystems
- Cars are the largest single source of greenhouse gases that cause global warming (also contribute to smog).

Smog



Land-Use Controls and Urban Sprawls?

- Should there be land-use controls against urban sprawl?
  - Infrastructure that supports urban sprawl is expensive (costs $10 million to build 1km of 4-lane expressway)
  - Sprawl breeds more sprawl. Building more roadways encourage more people to move out to the fringes of cities
  - Farmland is lost
  - Devastating to social and economic health of a city (allocation of tax dollars)
  - Land uses are segregated (homes vs. malls, vs city etc)

Case: Not Controlling it

- Land costs are lower on the fringes of cities = housing is more affordable and greater number of families can afford newer, spacious dwellings
- Construction of main roads creates natural lcoations for commercial development (concentrated in areas leaving residential streets traffic free)
- Homeowners in low-density housing developments plant trees and shrubs and grow lawns
- Jobs are being created in the suburbs

Land Use in Cities: Analyzing Land-Use Patterns

- Site, situation, function, economics, and politics exert an influence on where land uses are established
- **Competition for Land**
  - Businesses need the best locations in order to be successful
  - Competition for land is usually strongest around the most desirable intersections (Peak Value Intersections or PIVs) ie. Granville and Robson

Land Use in Cities: Analyzing Land-Use Patterns

- **Land-Use Zoning**
  - Rapid growth of cities has led municipal and provincial governments to set up land-use controls
  - Land that permits uses such as stores or banks is zoned "commercial"
  - Land where only homes are permitted is zoned "residential"
  - Land-Use controls also ensure that municipal services can be provided in the most efficient manner
  - City establishes an **official plan** – a broad plan for growth and development drawn up after lengthy consultation with the people of the city
  - Zoning by-laws to enforce

Building Sustainable Cities

- As cities in developing countries grow, global environmental damage will only increase
- Abandoning cities and moving to the countryside is not a solution because it removes the benefits of urban living
- Solution is to redefine and reshape cities – to make cities more sustainable

Building Sustainable Cities

- **Sustainable Cities:** those in which resource decisions today do not compromise the quality of life for future generations
  - Transportation system
  - Mix of land uses – reduce commuting
  - Variety of affordable housing types
  - Effective infrastructure (sewage treatment, water, health care, waste recycling, education)
  - Parks (civic amenities)
  - Alternative energy use maximization

Building Sustainable Cities

- Top 10 Sustainable Cities in the world: (depending who you ask)
  - Frankfurt
  - London
  - Copenhagen
  - Amsterdam
  - Rotterdam
  - Berlin
  - Seoul
  - Hong Kong

Video

- Masdar: The City of the Future
- https://www.youtube.com/watch?v=NIaz61zpLfs

Urban Problems and Sustainable Opportunities

- **Energy Consumption**
  - Cities account for 80% of the world's use of fossil fuels through residential, industrial, and transportation consumption
  - In a sustainable city, conservation would reduce the amount of energy required
  - Local, renewable forms of energy would supply most needs (eg. Solar-electric roof tiles

Urban Problems and Sustainable Opportunities

- **Transportation**
  - In N. America up to 94% of urban dwellers commute to work by car
  - Reducing our reliance on cars in urban areas will reduce pollution, increase space for more beneficial uses, reduce energy consumption
  - One transit rider uses 900L of gasoline per year less than a commuter using an automobile
  - Cities have to be compact (build up not out)

Urban Problems and Sustainable Opportunities

- **Food**
  - Almost all food consumed in cities has to be imported with tremendous costs measured in energy consumption, pollution from transportation, and distribution requirements
  - Cities could reduce their food needs if people modified their diets to suit local crops rather than imports
  - They could also use wasted urban spaces such as roof tops, boulevards, an backyards to produce food
  - Zone protection for agriculture must stay strong!

Urban Problems and Sustainable Opportunities

- **Wastes**
  - N. Americans are the most wasteful people on Earth
  - Typical person discards up to 1.6kg of waste per day
  - Recycling has been somewhat effective
  - Small industries spring up based on recycled materials

Urban Problems and Sustainable Opportunities

- **Density**
  - Many cities waste space
  - People live far apart and drive long distances to work
  - Sustainable city = use less space
  - Higher density will be achieved by **infilling** (increases density by rezoning and rebuilding in populated areas)
  - City centre will grow upward
  - People will not need cars and public transit will be fast and efficient

Urban Problems and Sustainable Opportunities

- Recap
  - Energy Consumption
  - Transportation
  - Food
  - Waste
  - Density

Sustainability

- https://www.youtube.com/watch?v=buH_vs7LFzw

Writing/Mini Research: In Partners Worksheet & Research

- Handout
- Research:
  - Research something that is being developed to help with one of the 5 areas of sustainable opportunities
  - Include
    - Image of the invention
    - Who invented it
    - What it's intended use is and which opportunity for sustainability it helps
    - 1-paragraph discussion
      - Practicality
      - Cost effective
      - Accessibility (who does it help and who can own one?)
      - Other comments