Unit 2: Population & Migration Patterns

Class	Human Geography

TABLE OF CONTENTS

2.1 — Population Distribution

Population density has increased significantly, but not distribution.

- Growth in settled areas

Where People Live

> People want to live in places with **relative ease and comfort**.

- Suitable land stays the same while population increases

Population Distribution: the pattern of human settlement (the spread of people across the Earth)

Population Density: a measure of the average population per area (how crowded a place is)

Physical Factors Influencing Population Distribution

Early humans settled around areas with food, water, and shelter

Midlatitudes: the regions between 30° and 60° North and South of the equator

- More moderate climates
- Better soil

Low-Lying Areas → better soil, better for crops

- Close to oceans → facilitates transportation, provides food, creates moderate temperatures (warmer during winter and colder during summer)

Most people live near **water bodies**.

- Fresh water for drinking
- Irrigation, transportation, and food

Climate: long-term patterns of weather in an area

- Greatly affects population distribution in direct and indirect ways
- Represents overall measures of conditions

Climate shapes the *soil*, *vegetation*, and *agricultural opportunities of an area*.

Temperate Climates: moderate climates

- *Usually* suitable conditions

Landforms: the natural features on the Earth's surface

- Influence population distribution

Human Factors Influencing Population Distribution

Humans originally focused on attractive places.

- Now, humans focus on other human populations.

Scale of Analysis & Physical Factors

Certain factors are relevant at different scales of analysis.

- Climate variation is different

Scale of Analysis & Human Factors

Government can affect population distribution.

Social Stratification: the hierarchical division of people into groups based on factors such as economic status, power, or ethnicity

- Most commonly based on wealth

Population Density

- Area's population in comparison to its size

Arithmetic Population Density

Arithmetic Population Density → calculated by dividing a region's population by its total area

- Doesn't indicate specifics areas where the population is distributed
- Doesn't show specific patterns

Physiological Population Density

Physiological Population Density → calculated by dividing population by arable land

- **Arable Land:** land suitable for growing crops
- Better measure of a region's *carrying capacity*

Carrying Capacity: the population a region can support without significant environmental deterioration

Agricultural Population Density

Agricultural Population Density → compares the number of farmers to arable land

- Shows efficiency of the region's farmers

Developed countries have lower agricultural population densities.

- Farmers can produce more food with less workers

Subsistence Agriculture: the practice of providing crops and livestock for a community's own survival

Population Density & Time

Density can very by time of year (ex. warmer states can increase in population during winter months)

2.2 — Consequences of Population Distribution

Densely-Settled → areas with high population densities

Sparsely-Settled → areas with low population densities

Implications of Distribution and Density

Distribution reflects the choices of people and their values.

Economic, Political & Social Processes

Most economic decisions are based on population distribution.

- Businesses make more profit when near more customers
- Manufacturing plants need more workers in the area

Political boundaries are changed every year for an average number of voters per district.

- State legislatures need to make districts of relatively-similar sizes

Redistricting: adjustments to boundaries

- Smaller urban districts and larger rural districts

Services & facilities are located closer to more people.

- Act as nodes of functional regions

Infrastructure & Urban Services

Infrastructure: the facilities and structures that allow people to carry out their typical activities

- More population = More demands on infrastructure

More popular regions (better infrastructure) have higher population densities

- Services in high-density areas is most cost-effective (more people served for less cost)

> Diseases and contamination can spread easily with more population density.

The Environment & Natural Resources

Overpopulation: having more people than it can support

- Dependent on population distribution & density

More population = More environmental strain

- Resources are depleted
- Less pure water (infected from sewers and industrial waste)

Better resources in an area = More people can be supported

> Technological changes can **INCREASE** the carrying capacity of a region.

- Climate can be a positive or negative factor on carrying capacity

Cities are generally built on land with the best carrying capacity.

2.3 — Population Composition

Population Composition

Age and Gender

Some countries have an *older* or *younger* overall population.

> Differences in population can shape **policies**.

Population Pyramids

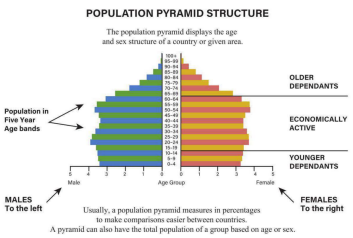
Age-Sex Composition Graph / Population Pyramid: a graph that provides information on a population with axes of age and gender

Reading Population Pyramids

Cohorts: the groups in the vertical age groups

- Usually in the middle

Male → left, female → right



Population pyramids are most common at the **national** scale.

Population Pyramid Structure

Growing Population → wide base, tapers upward (larger % of children compared to adults)

Common Patterns in Population Pyramids

Symmetrical → balance of males & females

- Females typically live longer than males (typically *asymmetrical*)

The Impacts of War

War leads to more deaths

- 18-40 → military deaths
    - Other civilian deaths can impact population

Families are delayed because men are away from women.

- **Birth Deficit:** slowdown of births

Baby Booms, Busts & Echoes

Baby Boom: a spike in the birth rate

- Typically after hostilities end (end of wars)

  Baby Bust: a lowering in birth rates once the boom ends
- **Echo:** an increase in birth rate following a *baby bust*

Migration and Other Anomalies

PYRAMID FEATURES	POSSIBLE REASONS FOR ANOMALY
Bars are longer for ages 18-25 than younger or older	- Small city with a large university - Shortage of school funding so families move away when they have children

PYRAMID FEATURES	POSSIBLE REASONS FOR ANOMALY
Bars are longer for ages 25-50 than children	- Economic crisis causes people to have less children - Government antinatalist policies - Epidemic causing infants to die
Bars are longer for ages 26→	- Warm climates attract retirees - Lack of jobs causes younger people to move
Bars are longer for males	- Jobs traditionally done by men have a boom - Military bases with more men
Bars are longer for females	- Large assisted-living homes

2.4 — Population Dynamics

Population grew *slowly* until the 19th century.

- Advancements in technology and medical care bring about more population

> People become more efficient at **extracting energy from the environment**.

Measuring the Number of Births

Crude Birth Rate (CBR): the number of live births per year for each 1,000 people

- **Total Fertility Rate (TFR)** → only focuses on women of childbearing age (15-49)

In most countries, the TFR has decreased over time.

Rate of Natural Increase (RNI): the difference between the *crude birth rate* and *crude death rate* of a defined group of people

- Shows trends

Doubling Time (DT): the number of years in which a population growing at a certain rate will double

- 70 ÷ *rate of natural increase*

Urbanization: the growth and development of cities

- Technology motivates people to move from *farms* to *cities*

Life Expectancy

Even though TFR decreases, the *death rate* also decreases and *life expectancy* increases. (Results in population increase)

Global Population Increase

Life Expectancy: the average number of years people live

- Greatly improved in the last century

Infant Mortality Rate (IMR): the number of children who die before their first birthday

- Decreased in the last century which brings up *life expectancy*

Food Production & Nutrition

Advances in agriculture helped to increase life expectancy through:

- Mechanized food production
- Improved farming techniques
- More efficient product transportation

Advances in agriculture led to:

- Greater farming efficiency
- Improved global food security
- Decrease farm family size
- Decrease of small towns

Public Sanitation

> Large concentrated populations led to the **spread of disease**.

- *Sewer systems* → protected water supplies from contamination
- *Boiling water* → prevented transmission of waterborne illnesses
- *Water treatment plants* → transported clean water to urban homes

Healthcare

Vaccines → preventive measures against diseases

Antibiotics → cured people with bacterial infections

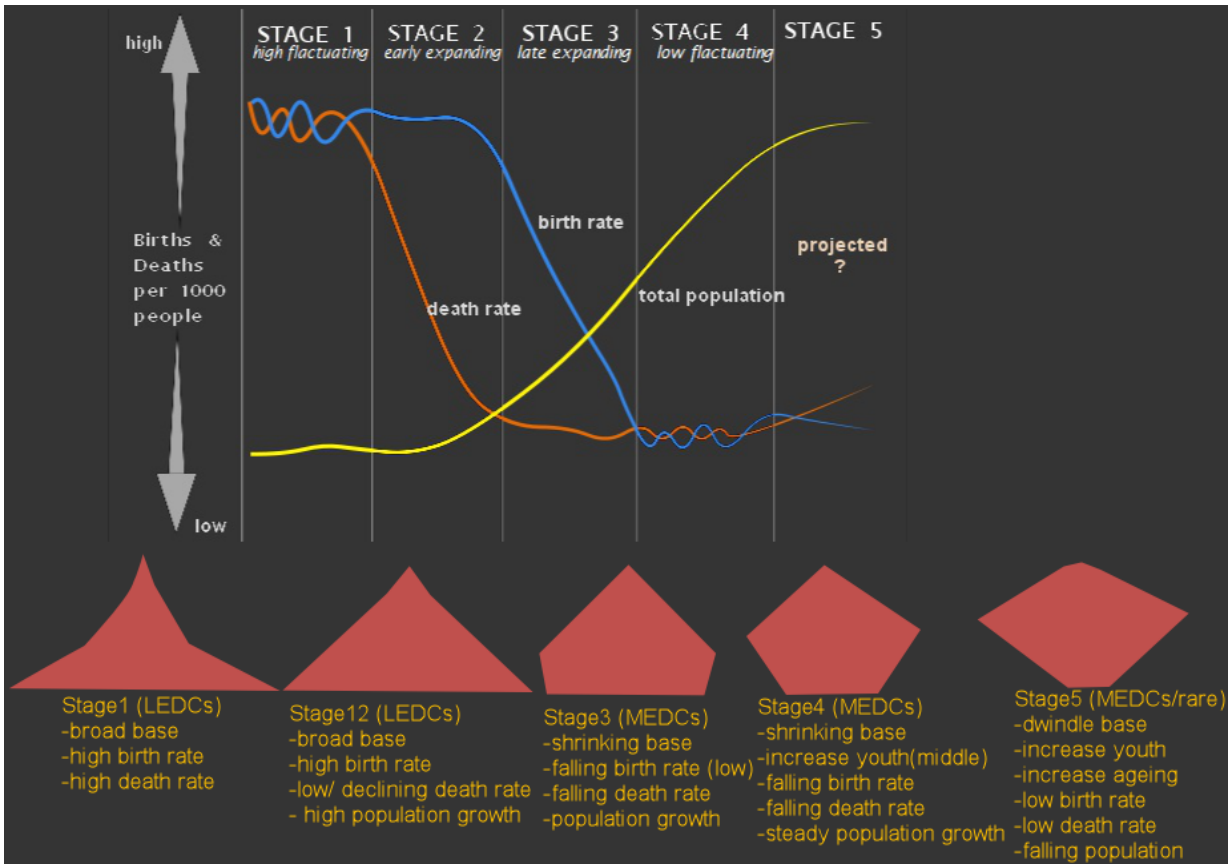
2.5 — The Demographic Transition Model

Population size over time → represented in models

Demographic Transition Model (DTM) → depicts five typical stages of population change that countries experience

FACTOR	1. HIGH STATIONARY	2. EARLY EXPANDING	3. LATE EXPANDING	4. LOW STATIONARY	5. DECLINING
BIRTH RATE	High (fluctuates)	High (fluctuates)	Declining with urbanization	Low with stable population	Falls below death rate
DEATH RATE	High (fluctuates)	Rapidly declining	Declining but not as fast	Low and stable	Low and may increase
NATURAL INCREASE	0 → 0.5%	0.5 → 4%	4 → 0.8%	0.8 → 0%	0 → -1%
POPULATION CHANGE	Low growth	Rapid growth	Rapid but slowing growth	Low growth	Low decline
POPULATION STRUCTURE	Very young	Very young	Young (rising life expectancy)	Balanced (more aging)	Very old
MODERN EXAMPLES	- Scattered isolated groups	- Mali - South Sudan	- Mexico - Turkey - Indonesia	- United States - China	- Japan - Germany
ECONOMY & SOCIETY	- Subsistence agriculture - Hunter-gathering	- Rural agricultural society - Less developed	- Urbanized - Emerging economies	- Urbanized service economy - Highly developed - Rising gender equity	- Urbanized service economy - Highly developed

Demographic Transition & Population Pyramids



Policy Implications

Different challenges occur in different stages.

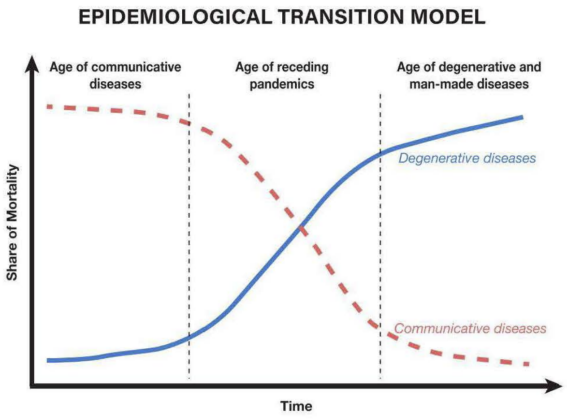
> The elderly have more power than the youth. (They can vote)

The demographic transition model can be used at multiple scales of analysis.

The Epidemiological Transition Model

- An extension of the *demographic transition model* that explains changing death rates and common causes of death

- Does **NOT** take into account the impact of lifestyle choices or local environmental factors that extend or shorten life expectancy



STAGE	DESCRIPTION	EFFECTS ON POPULATION
1. Disease and Famine	- Parasitic or infectious diseases - Accidents & animal attacks - Human conflicts - Food insecurity	High death rate & low life expectancy
2. Receding Pandemics	- Declining number of pandemics due to healthcare improvement	Decreasing death rate & increasing life expectancy
3. Degenerative and Human-Created Diseases	- Diseases of aging increase	Stabilizing death rate & increasing life expectancy
4. Delayed Degenerative Diseases	- Medical procedures delay the onset of diseases of aging	Lowest death rate & peak life expectancy
5. Reemergence of Infectious and Parasitic Diseases	- Infectious and parasitic diseases increase due to pathogens gaining resistance to current healthcare techniques	Life expectancy decreases

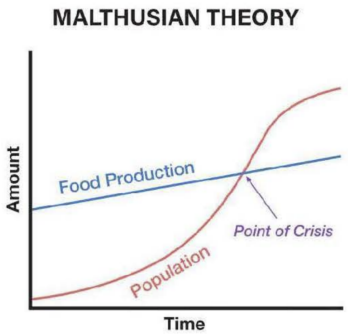
2.6 — Malthusian Theory

Thomas Malthus → essay on *people's relationship with the Earth*

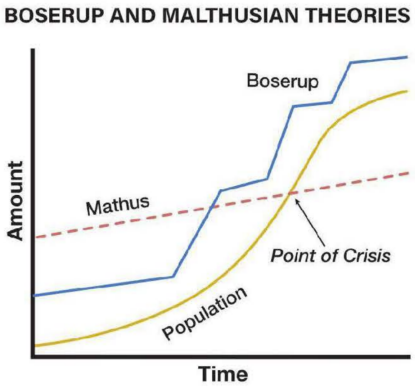
Food Production & Population Growth

Malthusian Theory: Malthus' ideas about population growth

- Believed that society would outgrow food
  - Leads to **overpopulation** (belief that famine or widespread starvation would limit population once population overgrows the amount of food)



Conflict over resources → war, plagues, and economic struggle



Ester Boserup → more people also increases the amount of work

- Increased agricultural work

Neo-Malthusians

- People who still believe in Malthusian theory today

Neo-Malthusians mention human use of non-renewable resources.

Causes of Population Change

- Natural disasters can reduce population
- Famine can reduce population
- Disease spread can reduce population

> Cultural factors can affect population change.

- Ex. farmers need more workers and will have more children and increased population

Education can reduce population but increase life expectancy.

2.7 — Population Policies

Population growth rate can be influenced by **POLITICAL** factors.

- Policies can be put in place to grow or stop population growth

Antinatalist Policies

Antinatalist Policies: policies that attempt to decrease the numbers of births in a country (ex. Chinese “later, longer, fewer” policy)

- Often used by *developing countries*

Gender Preference

Some cultures prefer male children over females. (ex. China’s One-Child Policy)

- Believe more economic output

Males outnumber females in the global population.

Pronatalist Policies

Pronatalist Policies: programs designed to increase the fertility rate (ex. paid time off for mothers, free childcare, family discounts)

- Governments believe that more population creates more economic output
- Promotes personal well-being as well

Demographic Balancing Equation → calculates population change from year to year

- Both immigration and emigration are included

2.8 — Women & Demographic Change

Changes in Fertility

More standing army time = Less babies to be made.

> Technology replaced child labor in factories, so less children were needed.

Total Fertility Rate (TFR): the average number of children who would be born per woman of that group in a country (assumes every woman lived through childbearing years)

Societal Roles of Women

Over time, women have gained **MORE ROLES IN SOCIETY**.

- Less time spent with children

> The longer women remained in education, the less children were made.

Family Planning

Family Planning Methods → thinking about when you want to have children and how many

- Causes a decline in population growth

Religion and culture can affect fertility rate.

Political Changes

Women have more say in politics → More say in decisions about fertility and family size

2.9 — Aging Populations

> Populations are getting older **ALL AROUND THE WORLD**.

Primary Reasons for Increase Average Age: longer life expectancy, lower crude birth rates

- People live long into retirement
- Disease mitigation and better care allows people to live longer

Lower birth rates → More adult age → Higher average age

Effects of Aging Populations

Political Impacts

- Older people vote differently than younger people
- Retirees are more likely to vote

Social Impacts

- Retired grandparents can raise children
- Retirees can maintain family while parents are at work

Economic Impacts

- Cost of elderly care increases
- Healthy elderly can still work and volunteer
- Healthcare jobs will increase

Environmental Impacts

> Population size affects the environment.

- **Land Degradation:** long-term damage to the soil's ability to support life
  - Ex. soil exhaustion - depletion of nutrients that has been farmed too long or intensively, deforestation

Dependency Ratio

Dependency Ratio (DR): a value that compares the working to the nonworking parts of a population

- Ages → 15: *Dependent Population*
- Ages 15 → 64: Labor / Workforce
- Ages 64 →: *Dependent Population*

The **dependency ratio** is the *number of people in a population who are economically supporting the rest of the population*.

- % of dependent population / workforce = *dependency ratio*

Dependent Population: the population considered too young or old to work

2.10 — Causes of Migration

Migration: permanent / semipermanent relocation of people from one place to another

- Early humans were very mobile, but movement decreased with urban settlements

Mobility: all types of movement from one location to another

- Temporary or permanent
- Over short or long distances

Circulation: temporary, repetitive movements that occur on a regular basis

Voluntary Migration

- Movement made by choice
- Decision to move away from a place with a decision to move to a place
  - **Push Factors:** negative circumstances, events or conditions present where someone currently is to compel someone to leave
  - **Pull Factors:** positive conditions and circumstances of a destination

There is most likely a combination of push and pull factors that cause an individual to migrate.

Immigrant: person who migrates across an international border with the intention of staying permanently

- *Perspective:* receiving country

Emigrant: person who is leaving a country

- *Perspective:* country from which someone is leaving

Net Migration: difference between the number of *emigrants* and the number of *immigrants* in a location

Examples of Push and Pull Factors

Economic → monetary

Social → ethnicity, race, gender, religion, culture, etc.

Political → governmental policies

Environmental → environmental conditions

	Push Factors	Pull Factors
ECONOMIC	- Rising unemployment - Increased technological use	- New factories - Increasing urban population
SOCIAL	- Religion-based violence	- Culture groups - Migrated peoples
POLITICAL	- Execution of policy-opposers	- Policy-opposers finding a new place
ENVIRONMENTAL	- Droughts - Natural disasters	- Environment-based migration

Demographic Push and Pull Factors → based on people

- Ex. gender imbalance, overpopulation
- **Migration Transition Model** → expanding countries experience rapid population growth and overcrowding
    - Limits economic opportunities
    - People migrate to less-crowded countries

	Push Factors	Pull Factors
DEMOGRAPHIC	- Industrial population increase - Land scarcity	- Provisions of land - Workers needed

Economic and employment opportunities are the main reason for migration.

Internal Voluntary Migration

Interregional Migration: movement from one region of a country to another

Intraregional Migration: movement within one region of a country

Intervening Obstacles & Opportunities

Intervening Obstacles: barriers that make it more difficult to reach a desired destination

- Introduced in 1966 by Everett Lee

Intervening Opportunities: opportunities found along an immigrant's travel that disrupts their original migration plan

- **Quotas:** limits on the number of immigrants allowed into a country every year

Examples of Intervening Obstacles

OBSTACLE	EXAMPLE
Economic	- Lack of money
Social	- Marriage along travels
Political	- Unable to get a visa
Environmental	- Mountain range

Ravenstein's Laws of Migration

- **Short Distances** - Most migrants only travel a short distance
    - Farther distance, less probability people will travel (*distance decay*)
        - Expanded to *time-distance decay*
- **Urban Areas** - Migrants traveling long distances usually settle in large urban areas
    - Most migrants believe larger cities have more opportunities than smaller cities

Gravity Model of Migration

- Size and distance between two locations influences the amount of interactions

Larger countries have more pull (*gravity*) while smaller countries have less gravity.

- As distance increases, gravity weakens.

Other Types of Migration

Step Migration: migration that occurs through smaller steps

- Migrants reach their destination after many smaller moves

Rural-to-Urban Migration: migration from agricultural areas to urban city areas

Countermigration: flow of movement in the opposite direction of a migration

- **Return Migration:** return of immigrants moving back to their former home

Transnational Migration → immigrants to a new country retain strong cultural, emotional, and financial ties to their country of origin

- Regularly return to their country of origin for visits
- Often send money to help those in their country of origin

Transhumance: a form of migration practiced by *nomads* who move herds between pastures

- International migration where nomads crossed national borders

Chain Migration: type of migration in which people move to a location because others have migrated there

- **Kinship Links:** networks of relatives and friends

Forced Migration

Forced Migration: people are compelled to move to a new place

- **Refugees:** people who are forced to leave their country for fear of persecution or death
  - Request **asylum** (right to protection) in new countries
  - **Repatriate:** return to one's home country
    - Reducing with time

The *United Nations High Commissioner for Refugees (UNHCR)* works to provide safety and security to displaced people.

Internationally-Displaced Persons: people who have been forced to flee their homes but remain within country borders

Human Trafficking: recruitment, transportation, harboring, or receipt of people through improper means

Other Migration Patterns

Youth → Most migrants are younger adults (~20-45)

- Most likely moving to improve their fortunes

Gender → Most international migrants are young males, but most internal migrants are female

- Men are more likely to move for work outside of the country
- Women are more likely to move within a country

Women are growing in international migration.

- More demand for women in jobs
- Female education is increasing

2.11 — Forced & Voluntary Migration

Forced Migration

Forced Migration → migrants have no choice but to move

- Flee from natural disasters, war, persecution, ethnic/cultural problems

The Slave Trade

- African people forced into labor to the New World by European countries (and others)

Internally-Displaced Persons and Refugees

People can be forced to move then there is imminent danger (political or environmental).

Internally-Displaced Persons (IDPs) → migrants forced to move to a part of their own country

Refugees → migrants having to cross international borders to move

- Usually go to neighboring countries
- Apply for **asylum** when they arrive in a country of destination
    - **Asylum:** protection granted by one country to an immigrant from another country with legitimate fear of harm if they return

Asylum-seekers can get protection from other countries.

Voluntary Migration

Voluntary Migration → people chose to relocate

- **Internal Migration** → movement occurring within a country
  - **Rural-to-Urban Migration** → people leaving rural areas to work and live in cities
  - Often words in *step migration* (people migrate in small steps)
  -

> In many cities, **migration** is the factor driving urban growth.

- **Transnational Migration** → people move from one country to another (internationally, not internally)
  - **Chain Migration** → group of people bring their family members and friends to migrate as well
  - **Guest Workers:** transnational migrants who relocate to a new country to provide labor that isn't available locally
    - Tend to stay in the host country permanently and become *migrants*

Transhumance: the process of herders moving with their animals to different pastures during different seasons

- Can be either *internal* or *international* migration

Migration Trends

- Many people are going to Europe for jobs or to escape conflict
- The United States receives many immigrants

2.12 — Effects of Migration

Migrants have many effects on places they leave and places they move to.

- Movement of people can be *controversial*

Migration Policies & Their Consequences

Circular Migration → migrant workers go back and forth between their country of origin and destination country

Policies Encouraging Immigration

Homestead Act (1862) → U.S. government gave land to settlers willing to farm it for 5 years

- U.S. government offered visas to well-educated people for them to stay in the country (recent days)

Guest-Worker Policies → regulate the number of workers who can temporarily enter each country to work in specific industries for a defined amount of time

- Set through the *Gulf Cooperation Council*

Family Reunification Policies → allow migrants to sponsor family members who migrate to the country

Some policies allow refugees to migrate quickly in emergencies.

- Allow foreign college students and easy path to becoming permanent residents

Policies Discouraging Immigration

Countries sometimes pass laws to restrict immigration.

- Makes entering the country difficult

Xenophobia: a strong dislike of people from another culture

Some policy decisions are based on *xenophobia* or economic concern.

- Ex. Chinese Exclusion Act (banned immigration from China between 1882 and 1943)

Effects of Migration

Effects on Countries of Origin

Benefits

- Immigrants move from poorer to wealthier regions
  - Can make **remittances** (money sent to their family and friends in the country they left)
  - Remittances help the individuals receiving them and contribute to the income of small countries
  - Qualified immigrants can reduce the *skills gap*

Skills Gap: a shortage of people trained in a particular industry

Costs

- Working-age people leave a country
  - Youth and elderly are left
  - Social structures are altered
- **Brain Drain:** when migration out of a country is made up of many highly-skilled people
  - Negative effect on a country because *talent is lost*

Effects on Receiving Countries

- Immigrants make cultural contributions
  - **Relocation Diffusion:** spread of ideas and cultural traits through migration

Ethnic Enclaves: neighborhoods filled primarily with people of the same ethnic group

- Add to cultural richness of the countries that they develop

Immigrants start many businesses.

> Conflicts can rise between immigrants and native-born citizens. **Discrimination** can rise.