Theories of Human Behavior and Geography

Behaviorism

Definition: Behaviorism is the theory that human and animal behavior can be explained in terms of conditioning, without appeal to thoughts or feelings, and that psychological disorders are best treated by altering behavior patterns.

Behaviorism emphasizes stimulus-response relationships. In animals, behaviors can be easily manipulated using conditioning — like Pavlov's famous experiment where dogs salivated at the sound of a bell after repeated associations with food.

- A controversial experiment was discussed where babies were subjected to violent conditioning — fed raw meat, exposed to aggression — and then released into society. Surprisingly, some behaved "normally," suggesting:
- Human behavior is **far more complex and harder to control** than that of animals.
- Unlike dogs, humans possess advanced cognition and socio-emotional variables.

Constructivism

Definition: Constructivism is the theory that knowledge and meaning are constructed through experience, not passively received from the environment.

- According to this view, **there is no single reality**. People's understanding of the world is shaped by:
- Cultural background
- Educational level
- Language and environment
- **Example:** A person from North Korea may interpret "freedom" differently from someone in Finland. If freedom were objectively real, it would carry a consistent definition across people — but it doesn't. Hence, reality is constructed, not discovered.

Cognitivism

Definition: Cognitivism focuses on the inner mental activities of the mind, such as thinking, memory, knowing, and problem-solving.

- Everyone has cognitive processes, but outcomes may differ even under similar inputs.
- Tightly linked to constructivism, it suggests that:
- Learning involves actively organizing information.
- Knowledge is internal and structured uniquely by each person.
- Multiple sources are needed to reduce bias and extract shared truths.

Space and Time (linked to Constructivism and Cognitivism)

- **Conceptual view:** If we travel faster than light, it's theoretically possible to travel back in time.
- **Multiverse idea:** Different dimensions may contain different versions of "you" — meaning no single identity is truly "real."
- Time becomes the dividing line between these dimensions.

- **Supports constructivism and cognitivism** by emphasizing subjectivity and interpretative reality.

Realism

Definition: Realism is the belief that certain facts and truths exist independent of perception, and they can be confirmed by direct observation and measurement.

- Used mostly in physical geography
- **Example:** If there are 10 rivers in a city, and we can see and measure them, we confirm their existence.

Possibilism

Definition: Possibilism argues that while the environment sets constraints, humans have the agency to choose from many possible courses of action within those limits.

- To declare something “real,” it must be testable with consistent results.
- **Example:** Water remains water regardless of the container — consistent, predictable, and verifiable.
- Helps confirm realism by supporting consistent physical laws.

Dialectical Approach

Definition: Dialectics is a method of argument that involves contradiction between ideas and their reconciliation into a new synthesis.

- **Thesis:** What has already happened — established reality.
- **Antithesis:** Opposing or imagined possibilities — things that have not happened yet.
- **Synthesis:** Combines both to produce a comprehensive understanding — the "bird’s eye view."
- Promotes neutrality, multiple perspectives, and deeper insight.

Historical Development of Geographical Study

Hunting and Gathering Era

- **Purpose:** Survival and awe of the natural world; believed powerful deities controlled nature.
- Early attempts at understanding space were deeply spiritual.
- Tools: Eyes, body (e.g., measuring distance by footstep), oral knowledge

Classical Period (Greek and Roman)

- **Focus:** Empire-building, road systems, and resource documentation
- **Achievements:**
- Maps, political geography, and trade routes
- Use of chariots and wheels for spatial movement
- Collapse of Rome led to fragmentation into smaller cultures and systems

Dark Ages

- General decline in scientific advancement
- Geography was stagnated due to political instability and religious suppression

Renaissance

- Revival of exploration and scientific inquiry
- Invention of large ships enabled global navigation
- Geography used for curiosity and knowledge expansion
- Scientific tools developed: compass, early maps

Colonial Period

- Driven by Industrial Revolution
- Geography used for resource exploitation and military advantage
- **Purpose:** Colonization, conquest, slavery
- **Tools:** Advanced weapons, colonial mapping

Modern Day

- **Focus:** Environmental preservation, sustainability, data-driven planning
- **Tools:**
- GPS
- GIS (Geographic Information Systems)
- Remote sensing and AI
- Purpose of geography shifted to understanding human impact and developing mitigation strategies

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What Is Geography?

Definition: Geography is the study of the Earth's surface and the spatial and ecological relationships between people and their environments.

- There is no universal definition of geography — it is vague and all-encompassing.
- Geography overlaps with other disciplines (history, politics, economics) but focuses uniquely on spatial and ecological perspectives.

How Geography Differs from Other Disciplines

History

- Uses **timeline** as its key method.
- Focuses on chronological sequences of events.

Political Science

- Interested in **political systems** and how they affect community development.
- Studies structures of governance and control.

Economics

- Uses **socioeconomic stratification**:
- Categorizes people into classes: lower (labor), middle (investors), upper (rulers)
- Studies how each class contributes to economic development

Geology

- Focuses on **natural landscapes** and geological processes.
- Studies activities related to the Earth's physical formation.

Note: While geography borrows tools and frameworks from other fields, its focus remains on spatial and ecological arrangements and their societal impact.

Spatial Perspective

Definition: The spatial perspective in geography emphasizes how people organize space and physical landscapes to reflect societal values and priorities.

Key Focus:

- Relationship between **humans and the land** they live in.
- What types of **activities**, **philosophies**, or **institutions** people value.

Methodology:

1. **List** all buildings and land use features in an area.
2. **Count** the frequency of each type (e.g., schools, markets, banks).
3. **Analyze** the most frequent to infer societal values.

Example: In Saraburi, the high number of schools suggests the community values education. In Sakon Nakhon, the prevalence of factories suggests a priority on industry.

Factors Influencing Economic Activities:

1. **Availability** of resources
2. **Amount** of resources
3. **Variety** of resources
4. **Access** to resources (e.g., law, policy)
5. **Access to technology**
6. **Knowledge and skills** of the population

Spatial Similarity:

- Areas with **similar physical environments** tend to adopt **similar economic activities**.
- These activities shape the **character** and **development level** of the region.

Ecological Perspective

Definition: The ecological perspective studies how humans interact with and are affected by their environment, focusing on adaptation and the role of non-physical factors.

Key Contrasts with Spatial Perspective:

- **Disagrees** that similar environments guarantee similar development.
- Emphasizes other **influential variables**, such as:
- Cultural values
- Political systems
- Religion
- History and lived experience
- Weather conditions

Example: Singapore vs. Burma - **Singapore** and **Burma** were both colonized by the British.

- Singapore became a strategic economic hub; British invested heavily.
- Burma received minimal attention; was used mainly for natural resources.
- **Result:** Drastically different levels of development despite shared colonial influence.

Note: The ecological perspective allows for complexity. It acknowledges that outcomes are shaped not just by geography but also by sociopolitical and historical dynamics.

Example: Thailand vs. Middle Eastern countries - Both practice agriculture.

- Differences in **weather**, **soil type**, and **religious belief** cause different landscapes.
- Thai houses use wood (moderate weather).
- Middle Eastern houses use materials suited for heat and sand.

Tools for Ecological Perspective

- **Spatial perspective** allows flexible area selection (village, city, region).
- **Ecological perspective** is limited to national-level analysis.
- Main tools: **national laws**, **policies**, and **regulations**.

Note: In ecological perspective, the word *value* means to exploit for benefit — unlike in spatial perspective where it means to cherish or uphold.

- **Example:** Thailand passed laws to protect forests, elephants, and even water monitors (used for exotic leather) — not because of moral belief, but to control overexploitation of valuable resources.

Incidents Affecting Thailand’s Security and Physical Geography

Case Study: Myanmar Crisis

- Ongoing conflict in Myanmar threatens Thailand’s **national security**.
- Influx of weapons (via Thai black market or as transit hub).

- Increased illegal migration:
- Burmese refugees seek jobs
- Some operate outside legal system, potentially driving up crime
- This affects:
- **Security** (arms proliferation, unregistered population)
- **Physical geography** (new housing, infrastructure, resource use)

Geography and Changing Landscapes

Key Factors Changing Geographic Character:

1. **Depletion of Resources**
2. Salaya has diamond → mining industry develops
3. Once depleted → residents leave or pivot to tourism (antique mines, souvenirs)
4. **Discovery of New Resources**
5. Discovery in Mahidol could make Thailand wealthy
6. Region changes from educational hub to industrial zone
7. **Technological Development**
8. Flood-resistant homes
9. Floating agriculture
10. Previously uninhabitable zones (e.g., swamps) become livable
11. **New Economic Conditions**
12. Example: ASEAN integration
13. Labor migration increases
14. Local areas adapt with:
15. New housing
16. Markets for Burmese, Laotian, Cambodian goods

Practical Uses of Geography

- **College students** need basic spatial awareness: bus stops, food, classrooms.
- **Store owners** must know customer flow, supplier locations.
- **Disaster zones** (e.g., hurricane-prone Louisiana): geographic knowledge saves lives.
- **Factory owners** consider:
- Access to labor
- Access to transport

- Access to energy and inputs

Importance of Geography

Why Geography Matters:

- Helps people make **informed decisions** about where to live, build, or invest
- Supports cost control (e.g., utilities, transportation, proximity to labor)
- Guides farmers in choosing crops based on weather, soil, and elevation
- Necessary for understanding risks and planning development

Geography vs. Nationalism Ideology

Geography's Influence

- Encourages **inclusivity**
- Promotes **understanding** and **appreciation** of differences
- Reduces conflict by creating awareness of cultural and spatial diversity
- Supports peaceful coexistence by highlighting **global interdependence**

Nationalism Ideology

Definition: Nationalism ideology unites people through shared identity, culture, and history, especially during national crises.

- Effective during hardship (e.g., war, internal conflict)
- Helps create solidarity and motivation for collective action
- **Short-term benefits**:
- Unity
- Patriotism
- National pride

  Note: If prolonged, nationalism may turn into **exclusivism** or **superiority bias**, leading to discrimination or conflict.

Case Studies

African Independence Movements

- During WWII, European colonizers withdrew soldiers for the war effort
- Africans united using **nationalism ideology**
- "We share hardship, language, and culture"
- Result: Successfully fought for independence

Thailand under Political Division

- Conflict between yellow-shirt and red-shirt factions
- Nationalism adopted by Prayuth Chan-o-cha to restore unity:
- Introduced **Twelve Thai Values**
- Mandated national anthem and media showcasing Thai heritage
- **Short-term effect:** Unity and peace
- **Long-term effect:** Superiority complex toward neighbors (e.g., Laos, Cambodia)
- Resulted in stereotypes and discrimination
- Created division and reduced mutual understanding

Case Studies: Why Geography Matters

Tilly Smith and the 2004 Tsunami

- A young English girl in Phuket noticed water receding — a geography teacher had taught her this was a tsunami warning.
- She alerted people; hundreds followed her to safety.
- Demonstrates how geographic knowledge can save lives.

Scientific Panic of the 1960s

- Scientists predicted global cooling and ice coverage.
- Wealthy people bought homes in tropical areas.
- Ignored human-caused warming (emissions, etc.).
- Shows danger of incomplete geographic or environmental awareness.

Nixon’s Diplomatic Misstep

- Confused Mauritius and Mauritania.
- Embarrassed the U.S. on the global stage — reflects poor geographic literacy.

Gravity Model

Definition: A formula to estimate the level of interaction between two places, typically based on population and distance.

Formula:

```
(Pa × Pb) / D^2
```

Where:

- Pa = population of place A
- Pb = population of place B

- D = distance between A and B

Use Case:

- Used to predict which cities will have the strongest interactions (trade, tourism, etc.)
- Helps with:
- Targeting customers
- Marketing plans
- Urban planning

  Note: It's a generalization tool — actual interaction data (calls, trips) is often unavailable.

Distance Decay Effect

Definition: The idea that interaction between two locales declines as the distance between them increases.

Impacts:

- **Production schedule:** Delays from accidents, bad roads, or disasters disrupt delivery.
- **Customer satisfaction:** Delayed products lower trust and loyalty.
- **Production cost:** More delays = more overtime, more electricity, and reusing raw materials.

Causes of Distance Decay:

- Incidents: Accidents, disasters, protests, political unrest
- Factors: Road quality, vehicle reliability

Human Geography vs. Physical Geography

- **Human Geography:** Qualitative — focuses on opinions, perceptions, abstract understanding.
- **Physical Geography:** Quantitative — focuses on measurable data (climate, landforms).

Five Themes of Geography

1. **Location**
2. Exact coordinates (latitude and longitude)
3. **Place**
4. Describes people and characteristics of an area
5. Example: “party at my place” evokes people and atmosphere
6. **Region**
7. Group of areas that share traits
8. Example: Isaan provinces, Southeast Asia as 3S (sun, sand, sex) region

9. **Movement**
10. Movement of people, goods, money, ideas, ideologies
11. **Human-Environmental Interaction**
12. How humans affect and are affected by the environment

Historical Shifts in Population

Hunting and Gathering Period

- Nomadic lifestyle, no permanent settlement
- Controlled population size for mobility and survival
- Dangerous abortion techniques, low life expectancy
- Nutrition diverse (trial/error with wild food) but unreliable

Agricultural Revolution

- Settled communities begin to grow crops (wheat, barley, rye)
- Gained control over food, but limited nutrition (grew few types)
- Early settlements on hillsides (fear of floods)
- Later moved to rivers/deltas after learning flood cycles
- **Irrigation systems invented**
- Increased plantation size and flexibility
- Created class system: rulers (who controlled water) vs laborers
- Higher food supply → higher birth rate → population growth

Industrial Revolution

- Huge food supply increases:
- Advanced machinery and farming techniques
- International trade and food imports
- Shift from barter to **monetary economy**
- Global nutrition improved, but food became chemically processed
- Population increased, but **not as fast** as during Agriculture era:
- Pollution, poor factory conditions increased death
- Machines reduced labor demand

Summary of Population Trends

Period	Food Stability	Nutrition Access	Population Growth	Notes
Hunting & Gathering	Low	High (random)	Very low	Unstable food, mobile lifestyle
Agricultural	Medium	Low	Very high	Irrigation led to food/security boost
Industrial	High	High	Moderate	Tech & trade boosted supply, but pollution & mechanization slowed growth

Additional Concepts

Cultural Landscape

- Material culture reflects local perception, lifestyle, and values

Doubling Time

- **Definition:** Time it takes for a population to double
- **Formula:** Find two years where pop. doubled, subtract
- Example: 1950: 150 → 2010: 300 → Doubling time = 60 years

Population Fluctuations

Short-Term Fluctuations

- Sudden events (natural disasters, war)
- Impact: Spikes in death rate
- Example: Hurricanes, earthquakes, epidemics

Long-Term Fluctuations

- Cultural or policy shifts
- Impact: Sustained birth rate change
- Example: Muslim communities with high birth rates due to religious beliefs

Key Terminology Clarification for Exams

- Carefully differentiate:
- **Birth rate** vs **Fertility rate**
- **Death rate** vs **Mortality rate**
- Pay close attention to keywords like **increase**, **decrease**, **high**, or **low**
- Mistaking one term or direction can lead to incorrect answers

Historical Causes of High Death Rates (1300s–1700s)

1. Disease

- **Black Death** and **Bubonic Plague** wiped out large populations, especially in urban areas.
- Spread rapidly from person to person.
- Major contribution to spikes in mortality in Europe.

2. Agricultural Practice: Monoculture

- **Mono-agriculture / monoculture** = growing only one crop (e.g., only rice).
- When natural disasters hit (e.g., flood, drought), entire food supply is affected.
- Leads to **famine**, **starvation**, and increased death rate.

Comparing Mono-Agriculture: Past vs Modern

Early Mono-Agricultural Practice

- Risky due to lack of food diversity
- Minimal trade with outsiders (fear of invasion)
- Entire communities suffered when crops failed

Modern Mono-Agriculture

- **Benefits:**
- Specialization leads to expertise and efficient production
- Reduced costs (right water, fertilizer, tools)
- Predictable quality and quantity
- Access to **global markets**, higher pricing
- **Risks Managed:**
- Food imports available during shortages
- International trade mitigates local crop failure
- **Market Dominance:**
- Farmers with large output can **monopolize**
- Undercut competitors with promotions (e.g., “Buy 1, Get 1 Free”)
- Drive out small farmers and later raise prices (as seen with CP group)

Feudalism and Food Supply

Structure:

- **King** grants **land** to loyal warriors (landlords)

- **Peasants/Serfs** work the land but do not own it
- Landlords and serfs both pay tribute (products or military service)
- Majority are **landless** — discouraged from innovating or increasing output
- Food supply remains **low**, innovation is stagnant

Note: Political systems like **feudalism** suppressed food production by disconnecting laborers from land ownership.

Reflective Prompt:

- If feudalism suppressed food output, which system might increase it?
- Possible answers: socialism, communism, democracy, authoritarianism — justify your reasoning.

Rebound in Birth Rate After High Mortality

- **Labor shortage** following mass death → communities seek replacement
- **Survivors have more resources** → feel more secure, settle, have children
- Example: 10 siblings reduced to 2 → the surviving 2 gain access to more land/resources → increased family growth

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Pre-Industrial Population Characteristics

- **High infant mortality**
- **Low life expectancy** (due to poor nutrition, disease, war)
- Both **birth and death rates fluctuated** frequently

High-Density Regions (Pre-Industrial)

- **China** – Advanced agriculture, stable food
- **India** – Population fluctuation due to internal conflict and natural disasters
- **Europe** – 125 million by 1750

Industrial Revolution: Overview

Timeline:

- Began: Late 17th Century in England
- Peak: Around 1850
- Decline: Began by 1870

Urbanization & Labor Shift:

- Rural populations migrated to cities for **factory jobs**
- Benefits: predictable wages, convenience, stability

- Problems: overcrowding, poor sanitation, pollution, rising death rates

Factory Lifestyle:

- Long working hours
- Dangerous machinery
- Poor air quality (textile dust)
- Women/children laborers paid less than men

Development of Energy Sources and Factory Locations

- **Water power (hydraulic)** → factories located near rivers
- **Steam power** → freed factories from water sources; enabled **urban growth**
- Steam-powered transportation (rail, boats) revolutionized **movement** and **trade**
- Led to:
- High food production
- Environmental damage
- Increased demand for coal and iron (mining boom)

Rise of Business and Class Mobility

- Factory economy allowed **middle and lower classes** to own businesses
- Not limited to aristocracy anymore
- Vendors emerged to support factory life (raw materials, clothing, food)
- Resulted in:
- Increased **productivity**
- More **income distribution**
- Creation of a **modern middle class**

Attachment to Luxury and Its Demographic Impact

- By 1850, urban populations embraced **consumerism**
- Entertainment, fashion, comfort became normalized
- This **impacted both birth and death rates**:
- Improved lifestyle = longer life
- But urban living = crowded, unsanitary = illness

Machine vs Manpower: Cultural Reactions

- Introduction of textile machines replaced cottage industries
- Example: **Luddites** — workers who destroyed machines that replaced them
- Machine efficiency:
- One spinning mule = output of 3,000 hand spinners

Spread of Industrialization to America

- Brought via **industrial espionage**
- Samuel Slater memorized spinning machine design
- Eli Whitney introduced **interchangeable parts** and invented the **cotton gin**
- **Cotton gin**:
- Increased cotton supply → drove U.S. Southern economy
- Increased demand for **slave labor**
- New England became center for U.S. industry due to:
- Rivers
- Ports
- Investment capital
- Poor soil for farming

Working Conditions in the U.S. Industrial Era

- Workers (esp. women and children) labored long hours
- Poor air, loud machines, low pay
- Boarding houses provided some safety but restricted freedom
- Immigrants replaced rural workers over time

Summary: Global Impact of Industrial Revolution

- Mass migration to cities
- Invention and tech advancement exploded
- Pollution and health crises increased
- Factory discipline regulated life via clocks
- Created **modern middle class** and introduced **modern urban life**

Factors Contributing to Increased Birth Rate

1. Technological and Innovation Improvements

- Enhanced life comfort and security
- Improved transportation allows mobility from unsafe or unsuitable regions
- Reduces hesitancy to have children as life quality improves

2. Medical Advancements

- Better medicine and medical tools save lives
- Increased life expectancy → more opportunity to find partners and have children
- Healthier bodies = higher fertility and longevity

3. Better Diplomatic Relations

- More peaceful international atmosphere reduces war-related stress
- People feel safe enough to have children
- Easier international migration → improved living conditions

4. Improved International Trade

- Stronger economies → better income and living standards
- Families feel more financially stable and capable of raising children

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Types of Societies and Their Effects on Birth & Death Rates

A. Oppressive Societies (e.g. in some less developed nations)

Characteristics:

- Women denied equal rights (politics, education, economics)
- Legal protections are weak or absent
- Marriage at a young age is a survival strategy

Consequences:

- **High birth rate:**
- Women use childbearing as security in marriage
- Limited choices force early marriage and frequent pregnancy
- **High infant and maternal mortality:**
- Women lack medical knowledge
- Poor health and over-pregnancy deteriorate women's bodies
- No access to healthcare tools or medications

Note: Women in these societies often die young from childbirth or disease due to nutritional depletion and lack of reproductive care.

B. Liberal / Developed Societies

Characteristics:

- Women have equal access to education, work, and autonomy
- Can choose whether, when, and how many children to have

Consequences:

- **Low birth rate:**
- Marriage and childbirth are delayed
- Many women prioritize career over motherhood
- High cost (time and energy) of pregnancy deters childbirth
- **Low death rate:**
- Educated women can care for their children and themselves better
- Fewer pregnancies reduce maternal risk
- Better access to healthcare

Role of Education in Population Dynamics

- Educated individuals can:
- Decide family planning based on income/job
- Care for children properly → lower infant mortality
- Evaluate their readiness and capacity to raise children
- Example: A person working night shifts understands they may be unable to care for a baby → may postpone or avoid childbirth

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Urban vs Rural Impact on Birth and Death Rates

Urban Areas

- Limited space and expensive cost of living lead to **low birth rates**.
- High cost per square meter forces families to live in small rooms or shared spaces.
- Limited privacy discourages large families.
- However, access to modern hospitals, advanced medical technologies, and skilled doctors contribute to **low death rates**.

Rural Areas

- Agriculture-based economies rely heavily on **manual labor**, pushing for **high birth rates**.

- Technology is available but underused due to:
- High cost of equipment.
- Price control laws on agricultural products in many countries.
- Labor is often cheaper than machines, especially in **less developed countries**.
- Limited access to healthcare and poor sanitation contribute to **high death rates**.

Developed countries contrast this with a highly mechanized agricultural sector where high wages make labor expensive and machines more cost-efficient in the long run.

Religious Influence on Birth Rate

- Religion plays a **major role** in influencing **birth rate**, but not so much death rate.
- Most major religions (Christianity, Islam, Buddhism, Hinduism, Sikhism):
- Encourage childbirth.
- Consider children a gift or duty from God.
- View procreation as a holy act.

Strategic Purpose

- Larger birth numbers **increase the number of followers**, thus increasing:
- Political influence.
- Financial power through donations (e.g. Catholic Church tithing 10%).

Religious institutions may influence government policies to protect and promote their values.

Wealth and Family Planning

Wealthy Families

- Although they can afford many children, often choose to have few.
- Main reason: **Preserving wealth** – avoid splitting inheritance too many ways.
- Smaller families ensure legacy and better resource allocation per child.

Poor Families

- Paradoxically, tend to have **more children**, due to:
- Limited access to contraception (too expensive).
- **Sexual activity as accessible pleasure** amid limited entertainment.
- Children viewed as **labor support** for manual jobs.
- Hope that children will provide **financial support** in future.

In many Thai families, children are raised with the expectation to financially repay their parents.

Modern vs Historical Causes of Death

In the Past

- **Natural disasters** (floods, hurricanes, famine) were major killers.
- Lack of technology made recovery slow and deadly.

Today

- Many diseases stem from **modern habits** and **human activities**:
- Poor diets → heart disease, diabetes, cancer.
- Environmental damage → more severe natural disasters.
- **Capitalism** is sometimes blamed for fostering:
- Greed, selfishness → crime and social conflict.
- Increased terrorism (e.g., 9/11 as fear-based strategy).

Developed vs Less Developed Countries (Demographics & Infrastructure)

Developed Countries

- Population: Generally **low**
- Access: **High** access to infrastructure and basic needs
- Standard of Living: **Very high**
- Facilities are **well-funded**, fewer people to share, so more efficient service
- Result: **Low birth rate**, **low death rate**

Less Developed Countries

- Population: Generally **high**
- Access: **Limited** access to infrastructure
- Infrastructure: Often **low quality**, overwhelmed by population
- Beliefs & Traditions: Push people to have more children
- Result: **High birth rate**, **high death rate**

Population Pyramid & Age Structure

```
Population is grouped into:

- Bottom: Youth (0-20) – vulnerable but future potential

- Middle: Working Age (21-60) – key economic contributors
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- Top: Elderly (61+) – vulnerable, high support needed
```

- **Developed Country Pyramid**: Upside-down or narrow base → low birth rate, more elderly
- **Less Developed Country Pyramid**: Traditional triangle → high birth rate, low elderly survival

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Pyramid Question Structure

1. **Identify**: Which pyramid shows a developed/less developed country? Why?
2. **Potential**: Which has more economic growth potential? Look at working-age group.
3. **Policy Suggestions** for each age group in:
4. Developed Country
5. Less Developed Country

Investment for Economic Development

- **Key**: Having many working-age people is **potential**, not guarantee
- **Guarantee** comes from: **Investment**

Local Investment

- Circulates money **within the country**
- Creates **jobs**
- But: May lack innovation or global competitiveness

Foreign Investment

- Brings **capital**, **technology**
- Buys **local raw materials**
- But:
- Profits may be **repatriated** abroad
- Not all companies hire local workers
- Example: Some Chinese firms bring workers from home country

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Retirement Support (Developed vs Less Developed)

- **Developed**:
- Good quality **retirement homes**
- Access to **entertainment** & **medical care**
- Elderly live longer, contribute via light work or creativity
- **Less Developed**:

- No strong elder care system
- Elderly die younger due to **lack of support**

Foreign Investors in Less Developed Countries

- Foreign investors sometimes **do not generate job opportunities** for locals. Example: seafood factories often hire Burmese workers, not Thai.
- Many investors prefer to **import their own workforce**, especially seen with **Chinese companies**.
- In border regions, jobs taken by Burmese or Cambodian workers often displace Thai laborers.

Tax Avoidance and Corruption

- Foreign companies may **avoid full tax payments** through bribery:
- Ex: If a company owes 300M baht in tax, they may negotiate to pay only 250M by bribing officials 50M.
- Common in governments with high **corruption levels**, undermining public benefit.

Pros and Cons of Foreign Investment

Pros:

- Brings in capital.
- Generates jobs (if local labor is used).
- Buys local raw materials, helping farmers.

Cons:

- Profit is often **repatriated** to the investor's country.
- **No transparency** in how much stays in the local economy.
- Can hire foreigners instead of locals, undermining national employment goals.

Labor Shortage in Developed Countries

Why?

- **Very low birth rates** → fewer people entering the labor force.

Solutions and Their Pros/Cons

1. **Allowing Foreign Workers**
2. **Pros**: Quick, easy, fast to fill labor gaps.
3. **Cons**:
4. **Leakage of income**: earnings sent back to home countries.
5. **Cultural disturbance**: imported lifestyles may alter local values.
6. **Legal vulnerability**: foreign workers may be exploited or cause crime.

7. **Environmental degradation**: foreigners may not value or conserve national resources.
8. **Political tension**: increased support for foreigners can cause resentment among locals.
9. **Wage distortion**: illegal migrants work below minimum wage → businesses prefer hiring them → wage standards drop.
10. **Conflict & Wage System Impact**
11. Legal workers get minimum wage; illegal migrants don't → cheaper for business owners.
12. Employers pay **under-the-table** to illegal workers.
13. Thai workers then must **undercut** their own wage to compete.

Addressing Labor Shortages: Solution 1 - Allowing Migrants to Enter the Country

Benefits:

- **Quick & Easy Fix:** Migrants can immediately fill vacant jobs and help sustain production.
- **Cost-effective:** No need to heavily invest in machines or long-term labor development.

Consequences:

Political:

- Support for migrants may upset native citizens who still lack access to basic infrastructure.
- Can lead to social unrest and distrust in government priorities.

Social:

- Increase in **crime rate** — either from migrant misunderstanding of laws or abuse by locals.
- Risk of **mutual rights violations** (migrants and citizens abusing one another).

Cultural:

- Migrants bring their own culture and practices.
- Can disturb or dilute local culture (e.g., Burmese influence in Mahachai area restaurants and goods).

Economic:

- Illegal migrants tend to accept lower wages, leading to exploitation and wage suppression.
- Legal migrants still cause job competition for native workers.

Environmental:

- Hard to predict or manage resource usage with undocumented populations.
- Natural resources risk overconsumption without accountability or citizenship obligation.

Addressing Labor Shortages: Solution 2 - Replacing Labor with Technology

Benefits:

- **Cost-efficient in the long run**:
- Machines don’t require salaries, insurance, or paid leave.
- Can operate 24/7 without overtime costs.
- **Predictable & Scalable**:
- Fewer legal complications compared to human labor.
- Reduces employer liability (e.g., injury, insurance).

Initial Costs:

- Expensive upfront (~1 million THB per machine).
- Includes setup, spare parts, technical staff, and updates.

Long-term Savings:

- Saves on:
- Wages (especially overtime)
- Social security, insurance
- Facilities (pantry, aircon, restrooms)
- Annual trips and bonuses

Drawbacks:

- **Not applicable to all sectors**:
- Roles needing creativity or taste (e.g. chefs) can’t be automated.
- **Requires constant updates and technical staff**.
- **Spare parts can delay production** if not stocked in advance.

Addressing Labor Shortages: Solution 3 - Encourage Higher Birth Rate

Ideal Outcome:

- Sustains economic independence with homegrown labor.
- Keeps wealth and spending internal.

Challenges:

- **Long wait time** (18–20 years before new generation enters workforce).
- Requires long-term investment and consistent policies.

- Past failure: Verbal support without real funding (e.g., unfulfilled 6,000 baht/month promise).

Key Requirements:

- Realistic, well-funded policies
- Trust-building with citizens
- Multi-solution approach: Combine short-term fixes (migration/technology) with long-term strategy (population growth)

Addressing Labor Shortages (Summary Table)

Solution	Pros	Cons
Migration	Fast, cheap, supports production	Cultural conflict, crime, wage suppression, political tension
Technology	Long-term savings, reliable, 24/7	Expensive, limited applicability, needs maintenance
Birth Incentive	Homegrown labor, internal wealth retention	Takes decades, needs consistent policy, high financial support

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Decline in Death Rate and Its Effects

- Decline in death rate increases life expectancy.
- Longer life → more chances to marry and have children.
- Surviving adults + newborns → population growth.
- Population growth can result in high population density.

Population Pyramid Analysis

- Populations are divided into:
- Very young (1–20): vulnerable but hold future potential.
- Working age (21–60): vital for economic development.

- Elderly (61+): vulnerable, demand state support.

Government vs. Religious Perspectives on Birth & Death Rates

Government Perspective

- **Easier to control death rate**:
- People fear death → follow regulations (e.g., vaccines, curfews).
- **Hard to control birth rate**:
- Cultural and religious beliefs interfere.
- Example: Chinese value sons; Christian/Muslim view children as gifts from God.
- Government lacks control over contraception use.

Religious Sector Perspective

- **Death rate is God's will**:
- Can't be predicted or controlled.
- **Birth rate is controllable**:
- Can be influenced via religious teachings (e.g., God's blessings).

Factors Contributing to Decline in Death Rate

1. Improved Food Supply

- New production & preservation techniques.
- Greater food quantity & availability.
- People feel secure → encouraged to raise children.

2. Better Nutrition → Stronger Bodies

- Enhanced resistance to disease.
- Fewer deaths from preventable illnesses.

3. Advanced Agriculture Techniques

- **Mono vs. Multiple Planting**:
- Diverse food supply.
- **Silo Storage**:
- Moisture control prolongs shelf life.
- Farmers can store and wait for better pricing.
- Encourages surplus production and access to bigger markets.

4. Freezing Systems

- Extends shelf life of perishable foods (e.g., fruits, dairy).
- Allows transport to/from international markets.
- Increased food variety and availability.
- Examples: Salmon, avocado, strawberries available year-round.

Factors Influencing Decline in Birth Rate and Death Rate

Definition: Birth rate refers to the number of live births per 1,000 people per year. Death rate is the number of deaths per 1,000 people per year. These indicators help measure population growth or decline.

Improvements in Medical Technology and Sanitation

- Development of refrigeration allowed for better food preservation, especially in crises such as wars.

- Introduction of antibiotics in the 1930s helped reduce deaths from infectious diseases.
- Urban zoning laws organized residential, industrial, and hospital areas to improve sanitation.
- Improved nutrition and medical care allowed infants to survive to adulthood, reducing the need for excess births.

Note: In earlier times, parents had more children anticipating that some would not survive. As child survival improved, the number of births declined.

Social and Economic Influences on Birth and Death Rates

- Economic activity, cultural beliefs, and religious values vary by region and affect birth/death rates.
- Example: Bangkok has lower birth and death rates due to urban lifestyle, higher incomes, and access to healthcare.
- Example: Northeastern Thai provinces have higher rates due to agricultural labor demands and limited access to medical care.
- In the US, racial inequality affects life expectancy. White people tend to live longer than Black people due to systemic inequalities and limited healthcare access for minorities.

Economic Self-Interest and Urbanization

Definition: Economic self-interest is the prioritization of personal financial stability and standard of living, often leading to reduced family sizes.

Economic Self-Interest

- Industrial prosperity led to the realization that children are financially burdensome.
- Families chose to limit births to maintain their standard of living.

Urbanization and Liberalization

- Technological advancements transformed urban living (e.g., tollway systems, banking, digital government services).
- Cities encouraged education, which introduced ideas of rights, liberty, and freedom.
- Women, gaining access to education, became aware of their rights and bodily autonomy, leading to intentional family planning.

Note: Empowerment of women was a major turning point in the reduction of birth rates.

Birth Control and Shifting Norms

- Birth control gained acceptance starting in England, then spread to Holland, Germany, and the US.
- In developed countries, access to information, clinics, and mobile apps supports family planning.
- Gender roles are being renegotiated in modern families, challenging traditional norms.

Literacy vs Education Rate

Definition: Literacy rate measures the ability to read and write. Education rate refers to the ability to comprehend, apply, and expand knowledge.

- Literacy = mechanical ability to read/write, not necessarily understand.
- Education = comprehension, problem-solving, and knowledge expansion.
- Literacy is commonly measured; education rate requires detailed qualitative studies.
- Many diploma holders may still lack true educational comprehension or application ability.

Note: Most countries only publish literacy rates due to the difficulty of assessing true education levels.

Types of Economic Activities

Definition: Economic activities are actions that involve the production, distribution, and consumption of goods and services. They are classified into three main types: primary, secondary, and tertiary.

Primary Economic Activities

Definition: Activities involving direct extraction or use of natural resources.

- Examples: agriculture, raising livestock, fishery, forestry, mining
- Require less investment and capital compared to manufacturing
- Common in less developed countries where:
- Labor is cheap and abundant
- Technology use is limited
- Products are non-standardized and mostly for local/national markets
- Only 10–20% of products are exported, yet this small export generates main income

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The Latest Agricultural Revolution (1928, USA)

Definition: A post-war agricultural transformation emphasizing increased production using modern methods.

- Triggered by post-war need to recover losses
- Key characteristics:
- Use of advanced technology
- Reduction in manpower (due to labor shortages and rising wages)
- Adoption of monoagriculture
- Export-oriented production

Note: This was driven by economic urgency and technological opportunity after WWI.

Agricultural Practice in Developed Countries

- Preference for technology over manpower

- Export-oriented agriculture
- Focus on **cash crops** or **commodity products**:
- Examples: coffee, tea, cocoa, soybean, potato, maize
- These are often modified before consumption (e.g., corn into syrup or animal feed)
- Developed nations often **import fresh food** from less developed countries

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Livestock and Fishery

Livestock

- Raised for:
- Consumption: meat, milk, eggs
- Labor
- Practices:
- Primitive herding: move with animals seasonally
- Mixed farming: crop-animal integration for mutual benefit
- Commercial livestock: raised for profit

Fishery

- High demand globally, especially in island nations (e.g., England, Japan, New Zealand)
- A key income generator due to seafood popularity

Comparative Agriculture: USA vs China

USA Agriculture:

- Heavily export-oriented
- Monoagriculture with technology-heavy methods
- Limited domestic consumption (~10–20%)
- Large portion (~50–60%) for export, ~30% for livestock feed
- Major importers: Europe and Africa
- African nations buy US crops at high prices in exchange for infrastructure development (e.g., roads, hospitals)

  Note: The US is not losing trade balance because infrastructure aid to Africa paves the way for exploitation and foreign investment access.

China Agriculture:

- Primarily for domestic consumption
- Exports only surplus production
- Uses both manpower and technology (roughly 50/50)

Agricultural Practices: China vs USA

China

- Uses a balanced mix of manpower and technology (50/50)
- Prefers growing multiple crops on a single piece of land to diversify risk
- Practices **mixed farming**: livestock and crops coexist and support each other
- Animal waste used as fertilizer
- Crops used to feed livestock
- This integration reduces production costs
- Focuses on food security and domestic consumption before export

USA

- Practices monoagriculture for efficiency and export
- Separates livestock and crop farming
- Buys specialized fertilizers and animal feed
- Larger focus on export over local consumption
- Relies heavily on technological investment

Formation of Agricultural Cooperations in the USA

Economic and Social Background

- WWII caused labor shortages as men were drafted
- Fertilizer, equipment, and animal feed companies lost income
- Post-war economy was tight: banks raised interest rates
- Prices of agricultural supplies increased by 25–40%

Farmer's Challenges

- Farmers had to borrow at high interest
- Could only afford limited equipment/seeds
- Couldn't use full farmland capacity
- Government set **ceiling price** (protects consumers) and **bottom price** (protects farmers)
- Limited profit margins
- Many farmers couldn’t repay loans → sold land to rich farmers

Emergence of Agricultural Cooperations

- Rich farmers accumulated too much land to manage alone

- They merged lands and investments, forming cooperations
- Characteristics of cooperation:
- Unequal shareholding → power concentrated in few hands
- Operates via **hierarchy** and **bureaucracy**
- More shares = more voting power and decision-making authority
- Time-consuming proposal approval process

The Chinese Commune System

- Started in 1949 after the Communist Party redistributed land
- Individual farming failed due to lack of equipment and skills
- Communes formed by merging lands and sharing:
- Equipment
- Knowledge
- Labor
- Final products (shared equally regardless of land size)
- Emphasized **equality**, **unity**, and **sense of belonging**
- No hierarchy or bureaucracy
- One person = one vote
- Fast decision-making
- Government encouraged communes to support peasants outside the system

Commune System in El Salvador

- Introduced by Spanish colonizers via European model
- **Unlike China**, El Salvador's commune was formed by **rich landowners**
- Focused on **cash crop export** (coffee, tea, cocoa) not local food security
- Operated like a corporation:
- Larger landowners had more power and votes
- Employed **hierarchy and bureaucracy**
- Real farmers were pushed out:
- To borders and forests
- Led to **environmental degradation** due to deforestation for farmland
- Some rich owners fenced off land without using it → inefficient land use

Industrial Characteristics: Developed vs Less Developed Countries

Less Developed Countries

- Factory owners often operate the entire business themselves
- Plan marketing, manage sales, hire labor, oversee production
- Lack of formal skills, learning occurs through trial and error
- Heavy reliance on manpower, limited use of machinery
- Products are:
- Non-standardized
- Low in quality and uniformity
- Hard to scale for large or international markets
- Domestic market focus due to:
- Limited buyer purchasing power
- Products must be cheap, limiting profit margins

Developed Countries

- Well-organized factories with functional departments:
- Marketing, Research & Development (R&D), Sales, Finance, etc.
- Skilled workers in specialized roles
- Investors focus on policy and capital, not daily operations
- High usage of technology and machines for production
- Products are standardized, high quality, mass-produced
- Wide variety of related products using same base ingredients
- Example: shampoo, conditioner, hair spray from same base
- Helps build customer trust and brand loyalty
- Strong marketing and branding due to budget allocation
- Capable of entering global markets and adapting to competition

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Fair Trade vs Non-Fair Trade Practices

Fair Trade (Common in Developed Countries)

- Legal workforce only (no child or illegal labor)
- No animal labor
- Environmentally conscious production
- Health and safety compliance

Non-Fair Trade (Common in Less Developed Countries)

- May use child labor or animal labor
- No environmental regulations
- Unsafe or unregulated production methods
- Less trust from international markets