GGH1501 - Learning Unit 6
Learning Unit 6 (Making and earning a living)

Excluded:
Ch 10:
Sect 10.11 - Commercial Agriculture and Market Forces

Ch 11:
Sect 11.4 - Changing Steel Production
Sect 11.5 - Changing Auto Production
Sect 11.6 - Ship by Boat, Rail, Truck or Air?

Ch 12:
Sect 12.3 - Hierarchy of Consumer Services
Sect 12.4 - Market Area Analysis
Sect 12.5 - Hierarchy of Business Services
Sect 12.6 - Business Services in Developing Countries
Sect 12.7 - Economic Base.

Key terms:

Development: Section B, Chapter 9

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent fertility rate</td>
<td>Number of births per 1 000 women age 15-19.</td>
</tr>
<tr>
<td>Developed country</td>
<td>Country that has progressed relatively far along a continuum of development.</td>
</tr>
<tr>
<td>Developing country</td>
<td>Country that is at a relatively early stage in the process of economic development.</td>
</tr>
<tr>
<td>Development</td>
<td>Process of improvement in the material conditions of people through diffusion of knowledge and technology.</td>
</tr>
<tr>
<td>Fair trade</td>
<td>Alternative to international trade that emphasizes small businesses and worker-owned and democratically run cooperatives and requires employers to pay workers fair wages, permit union organizing and comply with minimum environmental and safety standards.</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>Investment made by a foreign company in the economy of another country.</td>
</tr>
<tr>
<td>Gender Inequality Index (GII)</td>
<td>Indicator constructed by the UN to measure the extent of each country’s gender inequality.</td>
</tr>
<tr>
<td>Gross Domestic Product (GDP)</td>
<td>Value of the total output of goods and services produced by a country in a year, not accounting for the money that leaves and enters the country.</td>
</tr>
<tr>
<td>Gross national income (GNI)</td>
<td>Value of the total output of goods and services produced by a country in a year, including money that leaves and enters the country.</td>
</tr>
<tr>
<td><strong>Human Development Index (HDI):</strong></td>
<td>Indicator of the level of development for each country, constructed by the UN, combining income, literacy, education and life expectancy.</td>
</tr>
<tr>
<td><strong>Inequality-adjusted HDI (IHDI):</strong></td>
<td>Indicator of level of development for each country that modifies the HDI to account for inequality.</td>
</tr>
<tr>
<td><strong>Literacy rate:</strong></td>
<td>Percentage of country’s people who can read and write.</td>
</tr>
<tr>
<td><strong>Maternal mortality rate:</strong></td>
<td>Number of women who die giving birth per 100,000 births.</td>
</tr>
<tr>
<td><strong>Primary sector:</strong></td>
<td>Portion of economy concerned with the direct extraction of materials from Earth’s surface, generally through agriculture, although sometimes through mining, fishing and forestry.</td>
</tr>
<tr>
<td><strong>Productivity:</strong></td>
<td>Value of a particular product compared to the amount of labor needed to make it.</td>
</tr>
<tr>
<td><strong>Secondary sector:</strong></td>
<td>Portion of economy concerned with manufacturing useful products through processing, transforming and assembling raw materials.</td>
</tr>
<tr>
<td><strong>Structural adjustment program:</strong></td>
<td>Economic policies imposed on less developed countries by international agencies to create conditions encouraging international trade, such as raising taxes, reducing government spending, controlling inflation, selling publicly owned utilities to private corporations and charging citizens more for services.</td>
</tr>
<tr>
<td><strong>Tertiary sector:</strong></td>
<td>Portion of the economy concerned with transportation, communications, and utilities, sometimes extended to the provision of all goods and services to people in exchange for payment.</td>
</tr>
<tr>
<td><strong>Value added:</strong></td>
<td>Gross value of the product minus the costs of raw materials and energy.</td>
</tr>
</tbody>
</table>

**Food and agriculture:** Section B, Chapter 10

<p>| <strong>Agribusiness:</strong> | Commercial agriculture characterized by the integration of different steps in the food-processing industry, usually through ownership by large corporations. |
| <strong>Agriculture:</strong> | The deliberate effort to modify a portion of Earth’s surface through the cultivation of crops and the raising of livestock for sustenance or economic gain. |
| <strong>Aquaculture:</strong> | The cultivation of seafood under controlled conditions. |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal grain:</td>
<td>A grass yielding grain for food.</td>
</tr>
<tr>
<td>Commercial agriculture:</td>
<td>Agriculture undertaken primarily to generate products for sale off the farm.</td>
</tr>
<tr>
<td>Crop:</td>
<td>Grain or fruit gathered from a field as a harvest during a particular season.</td>
</tr>
<tr>
<td>Crop rotation:</td>
<td>The practice of rotating use of different fields from crop to crop each year, to avoid exhausting the soil.</td>
</tr>
<tr>
<td>Dietary energy consumption:</td>
<td>The amount of food that an individual consumes.</td>
</tr>
<tr>
<td>Food security:</td>
<td>Physical, social and economic access at all times to safe and nutritious food sufficient to meet dietary needs and food preferences for an active and healthy life.</td>
</tr>
<tr>
<td>Grain:</td>
<td>Seed of a cereal grass.</td>
</tr>
<tr>
<td>Green revolution:</td>
<td>Rapid diffusion of new agricultural technology, especially new high-yield seeds and fertilizers.</td>
</tr>
<tr>
<td>Intensive subsistence agriculture:</td>
<td>A form of subsistence agriculture in which farmers must expend a relatively large amount of effort to produce the maximum feasible yield from a parcel of land.</td>
</tr>
<tr>
<td>Milkshed:</td>
<td>The ring surrounding a city from which milk can be supplied without spoiling.</td>
</tr>
<tr>
<td>Overfishing:</td>
<td>Capturing fish faster than they can reproduce.</td>
</tr>
<tr>
<td>Pastoral nomadism:</td>
<td>A form of subsistence agriculture based on herding domesticated animals.</td>
</tr>
<tr>
<td>Plantation:</td>
<td>A large farm in tropical and subtropical climates that specializes in the production of one or two crops for sale, usually to a more developed country.</td>
</tr>
<tr>
<td>Ranching:</td>
<td>A form of commercial agriculture in which livestock graze over an extensive area.</td>
</tr>
<tr>
<td>Ridge tillage:</td>
<td>System of planting crops on ridge tops in order to reduce farm production costs and promote greater soil conservation.</td>
</tr>
<tr>
<td>Shifting cultivation:</td>
<td>A form of subsistence agriculture in which people shift activity from one field to another; each field is used for crops for a relatively few years and left fallow for a relatively long period.</td>
</tr>
<tr>
<td>Slash-and-burn agriculture:</td>
<td>Another name for shifting cultivation, so named because fields are cleared by slashing the vegetation and burning the debris.</td>
</tr>
<tr>
<td>Subsistence agriculture:</td>
<td>Agriculture designed primarily to provide food for direct consumption by the farmer and the farmers family.</td>
</tr>
<tr>
<td>Sustainable agriculture:</td>
<td>Farming methods that preserve long-term productivity of land and minimize pollution, typically by rotating soil-restoring crops with cash-</td>
</tr>
</tbody>
</table>
crops and reducing inputs of fertilizer and pesticides.

**Swidden:** A patch of land cleared for planting through slashing and burning.

**Taboo:** A restriction on behaviour imposed by social custom.

**Terroir:** French term for the contribution of a location’s distinctive physical features to the way food tastes, similar to the English expressions “grounded” or “sense of place”.

**Truck farming:** Commercial gardening and fruit farming, so named because truck was a Middle English word meaning bartering or the exchange of commodities.

**Undernourishment:** Dietary energy consumption that’s continuously below the minimum requirement for maintaining a healthy life and carrying out light physical activity.

**Wet rice:** Rice planted on dryland in a nursery and then moved to a deliberately flooded field to promote growth.

**Industry:** Section B, Chapter 11

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Break-of-bulk point</td>
<td>Location where transfer is possible from one mode of transportation to another.</td>
</tr>
<tr>
<td>Bulk-gaining industry</td>
<td>Industry in which the final product weighs more or comprises a greater volume than the inputs.</td>
</tr>
<tr>
<td>Bulk-reducing industry</td>
<td>Industry in which the final product weighs less or comprises a lower volume than the inputs.</td>
</tr>
<tr>
<td>Cottage industry</td>
<td>Manufacturing based in homes rather than in a factory, commonly found prior to the Industrial Revolution.</td>
</tr>
<tr>
<td>Industrial Revolution</td>
<td>A series of improvements in industrial technology that transformed the process of manufacturing goods.</td>
</tr>
<tr>
<td>Just-in-time delivery</td>
<td>Shipment of parts and materials to arrive at a factory, moments before they’re needed.</td>
</tr>
<tr>
<td>Labor-intensive industry</td>
<td>Industry for which labor costs comprise a high percentage of total expenses.</td>
</tr>
<tr>
<td>Right-to-work state</td>
<td>A U.S state that has passed a law preventing a union and company from negotiating a contract that requires workers to join a union as a condition of employment.</td>
</tr>
<tr>
<td>Site factors</td>
<td>Location factors related to the costs of factors of production inside the plant, such as land, labor and capital.</td>
</tr>
<tr>
<td>Situation factors</td>
<td>Location factors related to the transportation of materials into and from a factory.</td>
</tr>
</tbody>
</table>

**Services and settlements:** Section B, Chapter 12
<table>
<thead>
<tr>
<th><strong>Business services:</strong></th>
<th>Services that primarily meet the needs of other businesses, including professional, financial and transportation services.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central place:</strong></td>
<td>Market centre for the exchange of services by people attracted from the surrounding area.</td>
</tr>
<tr>
<td><strong>Central place theory:</strong></td>
<td>Theory that explains the distribution of services, based on the fact that settlements serve as centres of market areas for services; larger settlements are fewer and farther apart than smaller settlements and provide services for a larger number of people who are willing to travel farther.</td>
</tr>
<tr>
<td><strong>Clustered rural settlement:</strong></td>
<td>Agricultural based community in which a number of families live in close proximity to each other, with fields surrounding the collection of houses and farm buildings.</td>
</tr>
<tr>
<td><strong>Consumer services:</strong></td>
<td>Businesses that provide services primarily to individual consumers, including retail services and education, health and leisure services.</td>
</tr>
<tr>
<td><strong>Dispersed rural settlement:</strong></td>
<td>Rural settlement pattern in which farmers live on individual farms isolated from neighbours.</td>
</tr>
<tr>
<td><strong>Market area/hinterland:</strong></td>
<td>The area surrounding a central, from which people are attracted to use the place’s goods and services.</td>
</tr>
<tr>
<td><strong>Public services:</strong></td>
<td>Services offered by the government to provide security and protection for citizens and businesses.</td>
</tr>
<tr>
<td><strong>Range of a service:</strong></td>
<td>Maximum distance people are willing to travel to use a service.</td>
</tr>
<tr>
<td><strong>Service:</strong></td>
<td>Any activity that fulfils a human want or need and returns the money to those who provide it.</td>
</tr>
<tr>
<td><strong>Threshold:</strong></td>
<td>Minimum number of people needed to support the service.</td>
</tr>
</tbody>
</table>

**Global development trends**

**Measuring and comparing levels of development:**

**The distinction between developed and developing countries:**

<table>
<thead>
<tr>
<th>Developed countries:</th>
<th>Developing countries:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Also known = more developed country (MDC) or relatively developed country.</td>
<td>• Also known = less developed country (LDC).</td>
</tr>
<tr>
<td>• Progressed further along the development continuum.</td>
<td>• Made some progress towards development though less than developed countries.</td>
</tr>
<tr>
<td>• Progress further along the development continuum, UN considers</td>
<td>• Progress has varied among developing countries, the UN divides</td>
</tr>
</tbody>
</table>
The Human Development Index (HDI) and the Inequality-adjusted Human Development Index (IHDI) as well as the factors considered for measuring development:

Human Development Index (HDI):
- Measures level of development in every country.
- UN = computers it every year.
- HDI considers development to be a function of 3 factors:
  - Decent standard of living.
  - Access to knowledge.
  - Long and healthy life.
- Each country gets a score for each of these three factors, which gets combined in an overall HDI.
- Highest HDI = 1.0 or 100%

Inequality-adjusted Human Development Index (IHDI):
- UN = believes every person should have access to good health, knowledge and decent standards of living.
- IHDI = modifies the HDI to account for inequality.
- Perfect equality = HDI and IHDI = same
- Some inequality = IHDI = lower than HDI.
- Greater the difference = greater the inequality.
- Country with few people have high incomes, college degrees and good health care = lower IHDI than where difference in income, education + access to health care = minimal.

*The relationship between the percentage of GNI (Gross National Income) contributed by each economic sector in developed and developing countries. Developed countries generate more revenue from the tertiary sector while developing countries generate more revenue from the primary sector.

*The relationship between level of schooling and level of development. Higher levels of education allow the population to move from being an agricultural society to a society focussed on secondary and tertiary economic activities.

The spatial distribution and relative location of developed and developing countries:
• Divided into 9 regions according to physical, cultural + economic features.
• 2 of the 9 = developed = North America + Europe
• Other 7 = developing = Latin America, East Asia, Southwest Asia, North Africa, Southeast Asia, Central Asia, South Asia, and sub-Saharan Africa.
• 3 other distinctive areas = developed = Japan, Russia + South Pacific.

Take note that developed countries actually form a cluster, which creates an ideal opportunity for easy interaction and collaboration. Also take note of the following relationships:

• The relationship between the percentage of GNI (Gross National Income) contributed by each economic sector in developed and developing countries. Developed countries generate more revenue from the tertiary sector while developing countries generate more revenue from the primary sector.

• The relationship between level of schooling and level of development. Higher levels of education allow the population to move from being an agricultural society to a society focussed on secondary and tertiary economic activities.

The income, economic structure, productivity and education characteristics that differentiate a developed from a developing country:

<table>
<thead>
<tr>
<th>Explanation:</th>
<th>Developing countries:</th>
<th>Developed countries:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Measures average income through complex index = annual gross national income per capita at purchasing power parity. -Gross national income(GNI) = value of input of the goods and services produced in a</td>
<td>• Annual gross national income per capita = around $5 000. • Lower average incomes.</td>
<td>• Annual gross national income per capita = around $40 000. • Higher average incomes.</td>
</tr>
</tbody>
</table>
county per year – including money that leaves and enters the country.

- Gross domestic product = input of goods and services produced in a year by a country, but doesn’t account for money that leaves and enters the country.

<table>
<thead>
<tr>
<th>Economic structure:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Jobs fall into 3 categories: 1. Primary sector. (Including agriculture.) 2. Secondary sector. (Including manufacturing.) 3. Tertiary sector. (Including services.)</td>
<td>• Higher share of primary + secondary workers + smaller share of tertiary. • Average per capita income = higher, because people earn their living by different means. • People freed from the task of growing their own food = they can work in secondary + tertiary sector.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Productivity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Value of a particular product compared to the amount of labor needed to make it. • Measured by value added per worker. • Value added in manufacturing = gross value of product – costs of raw materials and energy.</td>
<td>• Less productive. • Can’t produce as much as developed countries, because of the lack of equipment, tools and machines. • More productive. • Produce more with less effort because they’ve access to more machines, tools and equipment to perform more work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- The duration what a learner spends in school = important because they learn more. - Pupil/teacher ratio = the amount of children in a class per teacher. - Literacy rate = percentage of country’s people who can read or write.</td>
<td>• Completes less years of school (average 6 years). • Pupil/teacher ratio = high. • Literacy rate = lower • Completes more years of school. (average 11 years) • Pupil/teacher ratio = lower • Literacy rate = high</td>
</tr>
</tbody>
</table>

**Gender and development**

Historically, top-tier positions in society (be it social, political or economic) have been
held and controlled by men. However, the trend of male dominance is increasingly being reduced as activists and development organisations campaign for equal rights among men and women and as countries realise that gender inequality hampers progressive development.

**The purpose of the Gender Inequality Index (GII):**

- Women aren’t treated as well as men.
- Aim is to measure the gender inequality in each country

**Gender Inequality Index (GII):**

- To measure the extent of each country’s gender inequality, the UN created GII.
- Higher the score = greater inequality between men and women.
- GII combines the
  - reproductive health,
  - empowerment and
  - labor.

**Reproductive health:**

Measured by:

- Maternal mortality ratio – number of women who die during giving birth per 100 000 births.
- Adolescent fertility rate – number of births per 1 000 women age 15-19.

**Empowerment:**

Measured by:

- % of seats held by women in the national legislature.
- % of women who completed high school.

**Labor:**

% of women holding full-time jobs outside the home. Women in developing = less likely than women in developed.

**The relationship between the level of gender inequality in development and the state/level of development in a country:**

The countries that have made significant strides towards gender equality are also the countries with much higher levels of development (for example Australia, Canada and central Europe). One of the most significant strides towards gender equality in recent history was made by the Canadian Prime Minister, Justin Trudeau, who announced a young and ethnically diverse cabinet including an equal number of men and women (The Guardian, 2015). By promoting gender equality, it will result in more development, because women can be just as smart as men which will result in them being able to do what they do best in a specific job. More qualified people in a country can result in more development, because they have the staff to develop the country.

**Development paths and world trade:**
To promote development, developing countries typically follow one or two development models:

**The characteristics and shortcomings of development through self-sufficiency (with examples):**

Development through self-sufficiency:

**Characteristics:**

- Investment = spread equally as possible across country’s economy.
- Pace of development = may be modest, but system = fair because residents and enterprises = share the benefits of development.
- Reducing poverty = takes precedence over encouraging a few people to become wealthy.
- Fledgling businesses = isolated from competition with large international corporations.
- Import of goods = limited by barriers such as:
  - tariffs
  - quotas
  - licenses.

**Shortcomings:**

- **Self-sufficiency protected inefficient industries:**
  Businesses = sell all they made at high government-controlled prices to customers from long waiting lists. Had little incentive to improve quality, lower production costs, reduce prices + increase production. Nor did they keep track of technological changes elsewhere.

- **Large bureaucracy was needed to administer the controls:**
  Complexed business system encourage abuse and corruption. Aspiring entrepreneurs found that struggling to produce goods or offer services was less rewarding financially than advising others how to get around the complex regulations.

**Examples:**

- India.

**Barriers to trade:**
- To import = foreign companies had to secure a license that had to be approved by government agencies.
- Importer with license = restricted on how much he’s allowed to import.
- Heavy taxes on imported goods = made the price more to consumers.
- Indian money = not be converted to other currencies.
- Businesses = require government permission to sell new product, modernize
factory, expand production, set prices, hire or fire workers and change job classification of current workers.

The characteristics and shortcomings of development through international trade (with examples):

Development through international trade:

Characteristics:

W.W. Rostow = 5 stage model of development in 1960:

1. Traditional society:
   - Very high percentage of people = agriculture and high percentage of national wealth allocated to what he called "non-productive" activities, such as military and religion.
2. Preconditions for takeoff:
   - Elite group of well-educated leaders initiates investment in technology + infrastructure, such as water supplies and transportation systems, designed to increase productivity.
3. The takeoff:
   - Rapid growth is generated in a limited number of economic activities, such as textiles or food products.
4. Drive to maturity:
   - Modern technology, previously confined to a few takeoff industries, diffuses to a wide variety of industries.
5. Age of mass consumption:
   - Economy shifts from production to heavy industry, such as steel and energy, to consumer goods, such as motor vehicles and refrigerators.

Shortcomings:

• Local hardships:
  Building up a handful of takeoff industries = forced some developing countries to cut back on production of food, clothing and other necessities for their own people.
• Slow market growth:
  Developing countries = trying to take advantage of their low-cost labor = find that markets in developed countries = growing more slowly than when the ‘four dragons’ used this strategy.
• Low commodity prices:
  Some developing countries have raw materials sought by manufactures and producers in developed countries. Sales = development of developing countries.

Examples:

• The “Four Dragons”:
South Korea
- Singapore
- Taiwan
- British colony of Hong Kong
- Also known as the “four little tigers” and “the gang of four”.
- Developed by producing a handful of manufactured goods, especially clothing and electronics that depended on low labor costs.
- Petroleum-rich Arabian Peninsula countries:
- Once worlds least developed countries = transformed overnight into some of the wealthiest due to escalating petroleum prices during the 1970’s.

The role of the World Trade Organisation (WTO) in promoting trade:

- World Trade Organisation (WTO) = facilitated adoption of international trade.
- Transnational corporations = major source of development funds.
- To promote international trade development model = countries joined WTO.
- Private corporations = eager to promote international trade.
- Russia = largest economy that joined WTO.

The WTO works to reduce barriers to trade in 3 principal ways:

1. Reduce or eliminate restrictions:
- On trade of manufactured goods, such as government subsidies of exports, quotas and tariffs.
- On international movement of money by banks, corporations and wealthy individuals.

2. Enforce agreements:
- By ruling on whether a country has violated WTO agreements.
- By ordering remedies when one country has been found to have violated the agreements.

3. Protect intellectual property:
- By hearing charges from an individual or corporation concerning copyright and patent violations in other countries.
- By ordering illegal copyright or patent activities to stop.

WTO has been sharply attacked by critics. Protesters routinely gather in the streets outside high-level meetings of the WTO:
- Charge that the WHO is antidemocratic, because decisions mad behind closed doors promote the interest of large corporations rather than the poor.
- Conservative critics charge the WHO compromises the power and sovereignty of individual countries because it can order changes in taxes and laws that it considers unfair trading practices.

The geographic distribution and impact of foreign direct investment and transnational corporations:
Foreign direct investment – investments made by a foreign company in the economy of another country, eg. Japanese carmakers built several assembly plants in Thailand.

Transnational corporation – invests + operates in countries other than the one in which their headquarters are located.

Millennium Development Goals

Progressive development (specifically in reducing the gap between the “rich” and the “poor”) can only be achieved through collaborative efforts from all parties that are involved, regardless of it being on a local or a global scale. Subsequently the United Nations (UN) have proposed eight Millennium Development Goals (MDG’s) that were intended to reduce the gap between developed and developing countries.

The reasons for the establishment of the millennium development goals:

• To narrow the gap between developing and developed countries.
• The UN has set 8 goals to further reduce the gap in the development.

The eight millennium development goals proposed by the United Nations:

To reduce disparities between developed and developing countries, the UN has set eight Millennium Development Goals that they wanted to reach by 2015.

1. End poverty and hunger:
   Progress – extreme poverty has been cut in Asia + sub-Saharan Africa.
2. Achieve universal primary (elementary school) education:
   Progress – percentage not in school = still high in South Asia + sub-Saharan Africa.
3. Promote gender equality and empower women:
   Progress – gender disparities remain in all regions.
4. Reduce child mortality:
   Progress – infant mortality rates declined in most regions, except sub-Saharan Africa.
5. Improve maternal health:
   Progress – women die during pregnancy especially in developing countries.
6. Combat HIV/AIDS, malaria and other diseases:
   Progress – number of people with HIV/AIDS = still high = sub-Saharan Africa.
7. Ensure environmental sustainability:
Progress – water scarcity and quality, deforestation + overfishing = still critical environmental issues.

8. Develop a global partnership for development:
Progress – aid from developed to developing countries has instead been declining.

**Food and Agriculture:**

**Origin and importance of agriculture:**

* The Agricultural Revolution signified an important shift in human civilisation as it enabled people, for the first time in history, to step away from their nomadic existence and settle down in suitable locations and focus on producing enough food to support settlements. It is also evident that different locations lend themselves to different agricultural possibilities due to the role of climate and combined with the influence of culture further diversifying the requirements and preferences for food production around the world.

**The aspects that influence diets around the world:**

Consumption of food around the world varies from the total consumption and source of nutrients. The variation results from a combination of:

1. Level of development:
   People from developed countries = consume more food and from different sources than the people in developing countries.

2. Physical conditions:
   Climate = important in influencing what can be most easily grown and therefore consumed in developing countries. Developed = food shipped long distances to locations with different climates.

3. Cultural preferences:
   Some food preferences and avoidances are expressed without regard for physical and economic factors.

**Social and environmental influences on food preferences:**

**Social – Food Taboos:**

- Strong taboos against food can be found in the Bible.
- Among the taboos is prohibition against consuming animals that don’t chew their cud or that have cloven feet, such as pigs and seafood lacking fins or scales, such as lobsters.
- Muslims = share the taboo against consuming pork.
- Due to the taboos, pigs are scarce in Muslim areas, such as Southwest Asia and North Africa.
- In China, were consumption of pork is embraced, they have nearly one-half of the world’s pig stock.
Environmental:

- Humans = mostly eat plants + animals – living things that spring from the soil + water of a region.
- Inhabitants of a region must consider the soil, climate, terrain, vegetation and other environmental features in deciding to produce particular food.
- People refuse to eat particular plants or animals that are thought to be strongly linked to negative forces in the environment.
- Hebrews = pig is prohibited in part because it’s more suited to sedentary farming than pastoral nomadism and in part because its meat spoils quickly in hot climates – the Mediterranean.
- Muslims, like Jews = don’t eat pork – pigs would compete with humans for food + water without offering compensating benefits, such as being able to pull a plow, carry loads, or provide milk + wool.
- In India – Hindu sanctions = against consuming cows, because they need to maintain a large supply of oxen (castrated male cows), the traditional choice for pulling plows as well as carts. A large supply of oxen must be maintained in India, because every field has to be plowed at approximately the same time – when the monsoon rains arrive.

Environmental features also influence food preferences as well as avoidances:
- Asia = soybeans are grown, but raw they’re toxic + indigestible. Lengthy cooking renders them edible, but in Asia = fuel is scarce. Asians have adapted to this dilemma by deriving foods from soybeans that don’t require extensive cooking. These include bean sprouts (germinated seeds), soy sauce (fermented soybeans) and bean curd (steamed soybeans).
- Europe = traditional preferences for quick-frying foods resulted in part from fuel shortages in Italy. In northern Europe, an abundant wood supply encourages the slow stewing + roasting of foods over fires, which also provided home heat in colder climate.

* The production and use of food serves as an excellent example of the two-way relationship characteristic of human-environment interaction. The required reading sections clearly indicate that humans alter their environments to produce the food that they prefer, but it is also evident that environments impose certain limitations on the type and amount of food that can be produced. In addition, human capital and skill also influence the possibilities of food production. For example, developed countries have the ability (in terms of social and financial capital) to produce more meat than developing countries, because the production of meat is more complex and requires more resources, as opposed to grain farming. All these situational determinants influence the spatial patterns of leading sources of food energy around the world.

Nutrition and hunger:

The definition of food security:
The physical, social and economic access at all times to safe and nutritious food sufficient to meet the dietary needs and food preferences for an active and healthy life.

**The concerning relationship between food production and population growth in Africa:**

* The global distribution pattern of undernourishment indicates that Africa, South America and parts of Asia are affected to a large extent by the impact of food shortages. In addition it is important to note that in countries where undernourishment is a concern, it is evident that people spend a very high percentage of their income on the little food that they do consume. When these two dynamics are coupled with underdevelopment and generally high levels of poverty, it severely aggravates the challenge for governments to reduce hunger.

**Agriculture regions and types of agriculture**

*The world’s food budget is maintained through agriculture and the sources of food production are differentiated in terms of subsistence agriculture and commercial agriculture. There are key differences between these two methods for producing food, including the infrastructure, investment, skill levels and labour requirements. Due to the importance of this sector, the success of a country’s agriculture also has a direct bearing on the level of development of a country.**

**The principle characteristics of and differences between commercial agriculture and subsistence agriculture:**

<table>
<thead>
<tr>
<th>Commercial:</th>
<th>Subsistence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large farms</td>
<td>Small farms</td>
</tr>
<tr>
<td>Small percentage of farmers</td>
<td>High percentage of farmers</td>
</tr>
<tr>
<td>Many machines</td>
<td>Few machines</td>
</tr>
<tr>
<td>Expensive business</td>
<td>They try to farm as cheap as possible.</td>
</tr>
<tr>
<td>Expand their holdings by renting other farmers grounds</td>
<td>Almost never rent farms from other farmers, because it’s to expensive.</td>
</tr>
<tr>
<td>Use methods to produce higher crop yields, like different types of fertilizers, and farming practices.</td>
<td>Use farming practices which their past generations used.</td>
</tr>
</tbody>
</table>

**South Africa's position relative to the rest of the world in terms of contribution to commercial agriculture:**

South Africa features among the stronger agricultural regions in the world, with a prominent focus on commercial agriculture, efficient farming practices and significant contributions to the production of maize, dairy, grain and livestock. The strong agricultural sector in South Africa has allowed the country to develop its secondary and tertiary sectors and from this viewpoint South Africa is regarded as one of the
leading more developed countries on the African continent. This signifies the importance of establishing a stable agricultural sector in order to create a platform for further progressive development.

**Agriculture and sustainable development:**

*The Earth has a limited amount of arable land, as you would have noticed from previous learning units and it is not possible to increase this in association with increases in population numbers. The balance between population numbers and arable land is further complicated by the fact that people are inclined to settle close to arable land and thus also use the land as a living space. The only alternatives are to increase the productive capacity of land through sustainable agricultural practices or to ensure that agricultural produce is distributed evenly around the world.*

**The three main strategies used to improve sustainable agriculture:**

Sustainable agriculture – an agriculture practice that preserves and enhances environmental quality. Increasing popular form = organic farming.

1. **Sensitive land management:**
   - Sustainable agriculture = protects soil in part through ridge tillage – system of planting crops on ridge tops.
   - Crops = planted = ridges = 10-20 cm = formed during cultivation or after harvest.
   - Crop = planted = same ridges = year after year.
   - Ridge tillage = attractive = lower production costs + greater soil observation.
   - Production costs lower = requires less tractors and machinery for planting.
   - Ridge tillage = minimum of soil disturbance from harvest to next planting.
   - Over several years = soil = more increased organic matter, greater water capacity and more earthworms.
   - Ridge tillage = more labor intensive = more profitable on per-acre basis.
   - Ridge tillage can gain favour for production of organic and herbicide-free soybeans = sell for more than the regular soybeans.

2. **Limited use of chemicals:**
   - Conventional agriculture = seeds = GM to survive when herbicides + insecticides = sprayed on fields to kill weeds + insects.
   - Are known as Roundup-Ready seeds, because the herbicide’s creator Monsanto Corp sells it under the brand name Round-up.
   - Roundup-ready seeds = causes = impacts on soil + water quality + causes some weeds to become resistant to the herbicide.
   - Sustainable agriculture = involves application of limited if any herbicides to control weeds.
   - Farmers can control weeds without chemicals, although it requires additional time and expenses that few can afford.
   - Ridge tilling = decreased use of chemicals = applied only to ridges not entire field.
   - Combining herbicide banding – which applies chemicals in narrow bands over crop
rows – with cultivating may be the best option for many farmers.

3. Integrated crop and livestock:
   • Animals = eat the crops grown on farm + they don’t live in small pens.
   • Sustainable agriculture = sensitive to the complexities of interdependencies between crops and livestock:
   1. Herd size + distribution:
      - correct number + distribution of livestock for the area is determined based on the landscape and forage sources.
      - Prolonged concentration of livestock on an area = can result in permanent loss of vegetative cover = farmer moves the animals.
   2. Animal confinement:
      - Moral + ethical debate regarding the welfare of livestock = intense.
      - From a practical perspective, manure from non-confined animals can contribute to soil fertility.
   3. Management in extreme weather:
      - Herd size may need to be reduced during periods of short- or long-term droughts.
   4. Flexible feeding and marketing:
      - Feed costs = largest single variable cost in livestock farming.
      - Feed costs can be kept to minimum by monitoring animal conditions + performance and understanding seasonal variations in feed and forage quality on the farm.

Industry:

The events that lead to the Industrial Revolution:

Proto-industrialization:
Had begun in rural areas which led to the rise of capitalism, a major driving force of the Industrial Revolution, in the countryside.

A change in farming methods:
Thanks to the Agricultural Revolution also cannot be overlooked. This is because increased amounts of food also led to a growth in the British population and changing demographics with increasing numbers of younger population every day. Yet, this began a vicious cycle – improved agricultural technology meant that less people were required to work the lands; yet, at the same time, there were more and more population reaching working age. This compelled agricultural potential laborers to seek employment elsewhere.

Regional and institutional changes:
In the banking and financial sectors also coincided with this timeframe. Capital throughout the England was greatly increased as the financial sector begins its modernization. On the other hand, the British engine was also beginning to roar.

Choosing locations for industry:
The favourable situational characteristics required to locate an industry:

Situation factors – involves transporting materials to and from a factory. They try to minimize the cost of transporting inputs to factory and finished goods to consumers.

Proximity to inputs:
- Tries to locate factory as close as possible to both buyers + sellers.
- If inputs are more expensive to transport than products, the optimal location for the factory is near the source of inputs.
- If the cost of transporting the product to the customers exceeds the cost of transporting inputs, then the optimal plant location is as close as possible to the customer.
- Every manufacturer uses inputs.
- An industry where the inputs weigh more than the final product = bulk-reducing industry.
- To minimize transport costs, a bulk-reducing industry locates near the source of inputs. Example = copper production.

Proximity to markets:
- Cost of transporting goods to consumers in a critical location factor for 3 types of industries:
  1. **Bulk-gaining industry:**
     - Make something gaining volume/weight during production.
     - Example = beverage bottles – they’re bulky, heavy + expensive to transport.
  2. **Single-market manufactures:**
     - Make products sold primarily in one location, so they also cluster near their markets.
     - Example: manufactures of parts for cars = specialized manufactures often with only 2 customers, like Toyota and General Motors.
  3. **Perishable products:**
     - Located near their markets so their products can reach consumers as rapidly as possible.
     - Example: eggs, milk, bread, etc.

The favourable site characteristics required to locate an industry:

Site factors – result from the unique characteristics of a location.

1. **Labor:**
   - Labor intensive industry = one in which wages and other compensation paid to employees = high percentage of expenses.
   - Health care, retirement pensions, and other benefits add substantially to wage compensation in developed countries, but not in developing countries.
   - Example = most of the cost of an iPhone is in the parts and gross profit to Apple. One step = labor intensive = putting parts together = done in China.
2. **Land:**
   - Not in heart of city anymore, but in suburban or rural areas, to provide enough
space for one-story buildings.
- Raw materials = delivered at one end and moved to other end of factory with conveyer belts or forklifts.
- Locations on urban periphery = attractive for factories to facilitate delivery of inputs and shipment of products.
- Land = much cheaper in suburban or rural locations than in center of city.

3. Capital:
- Manufactures borrow capital – the funds to establish new factories or expand existing ones.
- Banks get started.
- Ability to borrow = became a critical factor in the distribution of industry in developing countries.
- Financial institutions = developing countries = short of funds = new industries must seek loans from banks in developed countries.
- But they might not get loans if located in a country that’s perceived to have an unstable political system, a high debt level, or ill-advised economic policies.

Changing trends in industry:

The spatial distribution of textile and apparel production around the world and its association with developed and developing countries:

*The prescribed textbook does not identify specific changes that have taken place in the textile industry but they are implied when considering characteristics such as the location and availability of raw material, labour intensity and distribution opportunities. These characteristics mean that the textile industry has spread, from central Europe where it originated (remember the initial development that sparked the Industrial Revolution) to prominent locations in East and South Asia and South America, where resources (raw material and labour) are readily available.

Services and settlements:

*We have dealt with two economic sectors, namely, the primary sector (agriculture) and the secondary sector (industry). The tertiary sector = provides services. The service sector symbolises the next level of development where countries that have excelled in agriculture and industry have accumulated enough financial and intellectual capital and resources to focus on tertiary services while other countries take over their former production functions in an attempt to follow the same progressive development path. This does not mean that developed countries do not have primary and secondary economic sectors, but it does mean that developed countries employ more people in the tertiary sector because of their well-established primary and secondary sectors.

Services in urban areas:

The key characteristics of the three types of services:
Service – any activity that fulfils a human want or need and returns money to those who provide it.

Three types of services:

1. Consumer services:
   • Provide services to individual customers who want them + can afford them.
   • Four major types of consumer services:
     - Retail
     - Education
     - Health
     - Leisure

2. Business services:
   • Facilitate other businesses.
   • 3 main types:
     - Professional services
     - Financial services
     - Transportation services

3. Public services:
   • Provide security and protection for citizens + businesses.
   • Example:
     - Public service worker at national park.
   • Geographers = find useful because various types of services have different distributions and different factors influence locational decisions.

The relationship between the state of development of a country and its income from services:

Services generally require higher skilled labour and it is often this particular characteristic that sets developed and developing countries apart from each other.

How the market area, range and threshold of a service determines the most efficient location for that service (central place theory):

• Central place theory – explains the location of consumer services.
• A central place has a:
  1. Market area:
     • Selecting the right location = most important.
     • Central place = market center for the exchange of goods + services by people attracted from the surrounding area.
     • A central places compete against each other to serve as markets for goods + services.
     • This competition = creates a regular pattern of settlements, according to the central place theory.
Market area/hinterland = the area surrounding a service from which customers are attracted.

Market area = good example of a nodal region – a region with a core where the characteristics is most intense.

To establish the market area, a circle is drawn around the node of service on a map, territory inside the circle is its market area.

Most people prefer to get services from the nearest location = consumer near the center of the circle obtain services from local establishments.

The closer the periphery of the circle, the greater the percentage of customers who will choose to obtain services from other nodes.

2. Range of a service:

Market area of every service varies.

Geographers need 2 pieces of information to determine the extent of a market area – its range + threshold.

Range = maximum distance people are willing to travel to use a service.

The range = the radius of the circle drawn to delineate a service’s market area.

People travel a short distance for everyday good = grocery shop, but will travel a long distance for a game or concert.

Range of service must be determined from the radius of a circle that is irregularly shaped rather than perfectly round.

The irregularly shaped circle takes in the territory for which the proposed site is closer than the competitors’ sites.

The range must be modified further because most people think of distance in terms of time, rather than in terms of linear measure like km.

If you ask someone how far they will travel for a restaurant, they will probably answer in minutes or hours, than distance.

3. Threshold of a service:

Threshold – minimum number of people needed to support a service.

Every business has a number of costumers they need to generate a profit.

After the range have been determined, the service provider must determine whether a location is suitable by counting the potential customers inside the irregularly shaped circle.

How many potential consumers inside the range are counted depends on the product.

Convenience stores + fast-food restaurants = appeal to everyone.
• Cinemas = attract younger people, chiropractors = older people.
• If a good or service appeals to certain customers, then only the type of good or service that appeals to them should be counted inside the range.

**Rural-urban interaction:**

**The functions of rural settlements:**

• Rural settlements = centers for agriculture and provide a small number of services.

**The spatial patterns of rural settlements:**

<table>
<thead>
<tr>
<th>Dispersed rural settlement:</th>
<th>Clustered rural settlement:</th>
<th>Clustered linear rural settlement:</th>
<th>Clustered circular rural settlement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Characterized by farmers living on individual farms isolated from neighbors rather than alongside other farmers in settlements.</td>
<td>• Agricultural-based community in which a number of families live in a close proximity to each other, with fields surrounding the collection of houses and farm buildings.</td>
<td>• Arranged in a geometric pattern.</td>
<td>• Consists of a central open space surrounded by structures.</td>
</tr>
<tr>
<td>• Originated from American colonists.</td>
<td>• Typically includes; homes, barns, tool sheds and other farm structures, plus consumer services, such as religious structures, schools, and shops.</td>
<td>• Feature buildings along a road or body of water to facilitate transportation and communications.</td>
<td>• Von Thunen observed this circular pattern in Germany in his agricultural studies.</td>
</tr>
<tr>
<td>• Handful of public and business services may also be present, often centered on an open area called a common.</td>
<td>• Fields extend behind the buildings in long narrow strips.</td>
<td>• Germany’s Gewandorf settlements consisted of a core for houses, barns and churches encircled by agricultural activities.</td>
<td></td>
</tr>
<tr>
<td>• Typically started when early English settlers reached New England.</td>
<td>• Long-lot farms can be seen along St Lawrence River in Quebec,</td>
<td>• In sub-Saharan Africa the Maasi people build circular settlements</td>
<td></td>
</tr>
</tbody>
</table>
Trends in urbanisation, especially differences among developed and developing countries:

Urbanization – process by which the population of urban settlements grows. Has 2 dimensions:
1. Increase of number of people living in cities
2. Increase in the percentage of people living in cities.

Differences among developed and developing countries:

<table>
<thead>
<tr>
<th>Developed:</th>
<th>Developing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of people in cities:</td>
<td>Percentage of people in cities:</td>
</tr>
<tr>
<td>-Three-fourths of people in urban settlements.</td>
<td>-Two-fifths of people in urban settlements.</td>
</tr>
<tr>
<td>Number of people in cities:</td>
<td>Number of people in cities:</td>
</tr>
<tr>
<td>-Higher percentage of urban residents.</td>
<td>-Have more of the very large urban settlements.</td>
</tr>
</tbody>
</table>

Guidance for preparation for MCQ's

Human Development Index (HDI) and Inequality-adjusted HDI:

Human Development Index (HDI):
• Measures level of development in every country.
• UN = computers it every year.
• HDI considers development to be a function of 3 factors:
  - Decent standard of living.
  - Access to knowledge.
  - Long and healthy life.
• Each country gets a score for each of these three factors, which gets combined in
an overall HDI.
• Highest HDI = 1.0 or 100%

Inequality-adjusted Human Development Index (IHDI):
• UN = believes every person should have access to good health, knowledge and
decent standards of living.
• IHDI = modifies the HDI to account for inequality.
• Perfect equality = HDI and IHDI = same
• Some inequality = IHDI = lower than HDI.
• Greater the difference = greater the inequality.
• Country with few people have high incomes, college degrees and good health care
  = lower IHDI than where difference in income, education + access to health care =
  minimal.

Standards of living including economic structures, i.e. primary, secondary and
tertiary sectors:

**The two paths to development:**

1. Development through self-sufficiency:

**Characteristics:**

• Investment = spread equally as possible across country’s economy.
• Pace of development = may be modest, but system = fair because residents and
  enterprises = share the benefits of development.
• Reducing poverty = takes precedence over encouraging a few people to become
  wealthy.
• Fledgling businesses = isolated from competition with large international
  corporations.
• Import of goods = limited by barriers such as:
  - tariffs
  - quotas
  - licenses.

**Shortcomings:**

• **Self-sufficiency protected inefficient industries:**
  Businesses = sell all they made at high government-controlled prices to customers
  from long waiting lists. Had little incentive to improve quality, lower production costs,
  reduce prices + increase production. Nor did they keep track of technological
  changes elsewhere.
• **Large bureaucracy was needed to administer the controls:**
  Complexed business system encourage abuse and corruption. Aspiring
  entrepreneurs found that struggling to produce goods or offer services was less
  rewarding financially than advising others how to get around the complex
  regulations.
Examples:

- India.

Barriers to trade:
- To import = foreign companies had to secure a license that had to be approved by government agencies.
- Importer with license = restricted on how much he’s allowed to import.
- Heavy taxes on imported goods = made the price more to consumers.
- Indian money = not be converted to other currencies.
- Businesses = require government permission to sell new product, modernize factory, expand production, set prices, hire or fire workers and change job classification of current workers.

2. Development through international trade:

Characteristics:

W.W. Rostow = 5 stage model of development in 1960:

1. Traditional society:
   - Very high percentage of people = agriculture and high percentage of national wealth allocated to what he called “non-productive” activities, such as military and religion.
2. Preconditions for takeoff:
   - Elite group of well-educated leaders initiates investment in technology + infrastructure, such as water supplies and transportation systems, designed to increase productivity.
3. The takeoff:
   - Rapid growth is generated in a limited number of economic activities, such as textiles or food products.
4. Drive to maturity:
   - Modern technology, previously confined to a few takeoff industries, diffuses to a wide variety of industries.
5. Age of mass consumption:
   - Economy shifts from production to heavy industry, such as steel and energy, to consumer goods, such as motor vehicles and refrigerators.

Shortcomings:

- Local hardships:
  Building up a handful of takeoff industries = forced some developing countries to cut back on production of food, clothing and other necessities for their own people.
- Slow market growth:
  Developing countries = trying to take advantage of their low-cost labor = find that
markets in developed countries = growing more slowly than when the ‘four dragons’ used this strategy.

• Low commodity prices:
  Some developing countries have raw materials sought by manufactures and producers in developed countries. Sales = development of developing countries.

Examples:

• The “Four Dragons”:
  - South Korea
  - Singapore
  - Taiwan
  - British colony of Hong Kong
  - Also known as the “four little tigers” and “the gang of four”.
  - Developed by producing a handful of manufactured goods, especially clothing and electronics that depended on low labor costs.

• Petroleum-rich Arabian Peninsula countries:
  - Once worlds least developed countries = transformed overnight into some of the wealthiest due to escalating petroleum prices during the 1970’s.

**Millennium Development Goals:**

The reasons for the establishment of the millennium development goals:

- To narrow the gap between developing and developed countries.
- The UN has set 8 goals to further reduce the gap in the development.

The eight millennium development goals proposed by the United Nations:

To reduce disparities between developed and developing countries, the UN has set eight Millennium Development Goals that they wanted to reach by 2015.

1. **End poverty and hunger:**
   Progress – extreme poverty has been cut in Asia + sub-Saharan Africa.

2. **Achieve universal primary (elementary school) education:**
   Progress – percentage not in school = still high in South Asia + sub-Saharan Africa.

3. **Promote gender equality and empower women:**
   Progress – gender disparities remain in all regions.

4. **Reduce child mortality:**
   Progress – infant mortality rates declined in most regions, except sub-Saharan Africa.

5. **Improve maternal health:**
   Progress – women die during pregnancy especially in developing countries.

6. **Combat HIV/AIDS, malaria and other diseases:**
   Progress – number of people with HIV/AIDS = still high = sub-Saharan Africa.

7. **Ensure environmental sustainability:**
   Progress – water scarcity and quality, deforestation + overfishing = still critical environmental issues.
8. **Develop a global partnership for development:**
Progress – aid from developed to developing countries has instead been declining.

**Diet and food preferences:**

The aspects that influence diets around the world:

Consumption of food around the world varies from the total consumption and source of nutrients. The variation results from a combination of:

1. **Level of development:**
People from developed countries = consume more food and from different sources than the people in developing countries.

2. **Physical conditions:**
Climate = important in influencing what can be most easily grown and therefore consumed in developing countries. Developed = food shipped long distances to locations with different climates.

3. **Cultural preferences:**
Some food preferences and avoidances are expressed without regard for physical and economic factors.

**Dietary energy consumption:**
• the amount of food that an individual consumes.
• Measured in kilocalorie (kcal) or calories.
• Most kcal through cereal grains, which is a grass that yields grain for food.

**Source of nutrients:**
• Protein – needed for growth + maintenance of human body.
• Developed countries = leading source of protein = meat products – beef, pork, poultry.
• Developing counties = leading source of protein = cereal grains.

**Social and environmental influences on food preferences:**

**Social – Food Taboos:**
• Strong taboos against food can be found in the Bible.
• Among the taboos is prohibition against consuming animals that don’t chew their cud or that have cloven feet, such as pigs and seafood lacking fins or scales, such as lobsters.
• Muslims = share the taboo against consuming pork.
• Due to the taboos, pigs are scarce in Muslim areas, such as Southwest Asia and North Africa.
• In China, were consumption of pork is embraced, they have nearly one-half of the world’s pig stock.

**Environmental:**
Humans = mostly eat plants + animals – living things that spring from the soil + water of a region.

Inhabitants of a region must consider the soil, climate, terrain, vegetation and other environmental features in deciding to produce particular food.

People refuse to eat particular plants or animals that are thought to be strongly linked to negative forces in the environment.

Hebrews = pig is prohibited in part because it’s more suited to sedentary farming than pastoral nomadism and in part because its meat spoils quickly in hot climates – the Mediterranean.

Muslims, like Jews = don’t eat pork – pigs would compete with humans for food + water without offering compensating benefits, such as being able to pull a plow, carry loads, or provide milk + wool.

In India – Hindu sanctions = against consuming cows, because they need to maintain a large supply of oxen (castrated male cows), the traditional choice for pulling plows as well as carts. A large supply of oxen must be maintained in India, because every field has to be plowed at approximately the same time – when the monsoon rains arrive.

Environmental features also influence food preferences as well as avoidances:

Asia = soybeans are grown, but raw they’re toxic + indigestible. Lengthy cooking renders them edible, but in Asia = fuel is scarce. Asians have adapted to this dilemma by deriving foods from soybeans that don’t require extensive cooking. These include bean sprouts (germinated seeds), soy sauce (fermented soybeans) and bean curd (steamed soybeans).

Europe = traditional preferences for quick-frying foods resulted in part from fuel shortages in Italy. In northern Europe, an abundant wood supply encourages the slow stewing + roasting of foods over fires, which also provided home heat in colder climate.

Food + place: The concept of terroir:

Terror – French term for the way food tastes = English = grounded or sense of place.

Terror = used to refer to the combination of soil, climate, and other physical features that contribute to the distinctive taste of wine:

Climate – vineyards = best in temperate climates of moderate cold, rainy winters + fairly long, hot summers. Hot weather = needed for the fruit to mature, winter = preferred season for rain, because plant diseases that cause the fruit to rot are more active in hot, humid weather.

Landforms – planted on hillsides, to maximize the exposure of sunlight + facilitate drainage. Near a lake/river = desirable because water can temper extremes of temperature.

Soil – best = soil is coarse + well-drained.
Comparing subsistence and commercial agriculture:

<table>
<thead>
<tr>
<th>Commercial:</th>
<th>Subsistence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Large farms</td>
<td>• Small farms</td>
</tr>
<tr>
<td>• Small percentage of farmers</td>
<td>• High percentage of farmers</td>
</tr>
<tr>
<td>• Many machines</td>
<td>• Few machines</td>
</tr>
<tr>
<td>• Expensive business</td>
<td>• They try to farm as cheap as possible.</td>
</tr>
<tr>
<td>• Expand their holdings by renting other farmers grounds</td>
<td>• Almost never rent farms from other farmers, because it's too expensive.</td>
</tr>
<tr>
<td>• Use methods to produce higher crop yields, like different types of fertilizers, and farming practices.</td>
<td>• Use farming practices which their past generations used.</td>
</tr>
</tbody>
</table>

Differences between commercial and sustainable agriculture:

<table>
<thead>
<tr>
<th>Commercial:</th>
<th>Sustainable/organic:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Large farms</td>
<td>• Rely on sensitive land management – protects soil in parts through ridge tillage.</td>
</tr>
<tr>
<td>• Small percentage of farmers</td>
<td>• Limited use of chemicals – control weeds without chemicals.</td>
</tr>
<tr>
<td>• Many machines</td>
<td>• Controlling weeds without chemicals can be expensive + time consuming.</td>
</tr>
<tr>
<td>• Expensive business</td>
<td>• Integrate the growing of crops + raising of livestock as much as possible at the level of the individual farm.</td>
</tr>
<tr>
<td>• Expand their holdings by renting other farmers grounds</td>
<td>• The animals consume crops grown on the farm + aren’t confined in small pens.</td>
</tr>
<tr>
<td>• Use methods to produce higher crop yields, like different types of fertilizers, and farming practices.</td>
<td>• Feed costs = largest single variable cost in their operation.</td>
</tr>
</tbody>
</table>

Factors affecting the location of industries:

The favourable situational characteristics required to locate an industry:

Situation factors – involves transporting materials to and from a factory. They try to minimize the cost of transporting inputs to factory and finished goods to consumers.

Proximity to inputs:
- Tries to locate factory as close as possible to both buyers + sellers.
- If inputs are more expensive to transport than products, the optimal location for the factory is near the source of inputs.
- If the cost of transporting the product to the customers exceeds the cost of transporting inputs, then the optimal plant location is as close as possible to the customer.
- Every manufacturer uses inputs.
- An industry where the inputs weigh more than the final product = bulk-reducing
industry.
- To minimize transport costs, a bulk-reducing industry locates near the source of inputs. Example = copper production.

Proximity to markets:
- Cost of transporting goods to consumers in a critical location factor for 3 types of industries:
  1. **Bulk-gaining industry:**
     - Make something gaining volume/weight during production.
     - Example = beverage bottles – they’re bulky, heavy + expensive to transport.
  2. **Single-market manufactures:**
     - Make products sold primarily in one location, so they also cluster near their markets.
     - Example: manufactures of parts for cars = specialized manufactures often with only 2 customers, like Toyota and General Motors.
  3. **Perishable products:**
     - Located near their markets so their products can reach consumers as rapidly as possible.
     - Example: eggs, milk, bread, etc.

The favourable site characteristics required to locate an industry:

Site factors – result from the unique characteristics of a location.

1. **Labor:**
   - Labor intensive industry = one in which wages and other compensation paid to employees = high percentage of expenses.
   - Health care, retirement pensions, and other benefits add substantially to wage compensation in developed countries, but not in developing countries.
   - Example = most of the cost of an iPhone is in the parts and gross profit to Apple.
     One step = labor intensive = putting parts together = done in China.

2. **Land:**
   - Not in heart of city anymore, but in suburban or rural areas, to provide enough space for one-story buildings.
   - Raw materials = delivered at one end and moved to other end of factory with conveyer belts or forklifts.
   - Locations on urban periphery = attractive for factories to facilitate delivery of inputs and shipment of products.
   - Land = much cheaper in suburban or rural locations than in center of city.

3. **Capital:**
   - Manufactures borrow capital – the funds to establish new factories or expand existing ones.
   - Banks get started.
   - Ability to borrow = became a critical factor in the distribution of industry in developing countries.
   - Financial institutions = developing countries = short of funds = new industries must seek loans from banks in developed countries.
- But they might not get loans if located in a country that’s perceived to have an unstable political system, a high debt level, or ill-advised economic policies.

• 3 Site factors – land, labor, and capital – control the cost of doing business at a location.
• Production of textiles + apparel has traditionally been located primarily because of site factors.
• New industrial regions are emerging because of their increased importance for site + situation factors.

**Types of services that exist:**

Service – any activity that fulfils a human want or need and returns money to those who provide it.

**Three types of services:**

1. **Consumer services:**
   • Provide services to individual customers who want them + can afford them.
   • Four major types of consumer services:
     - Retail
     - Education
     - Health
     - Leisure

2. **Business services:**
   • Facilitate other businesses.
   • 3 main types:
     - Professional services
     - Financial services
     - Transportation services

3. **Public services:**
   • Provide security and protection for citizens + businesses.
   • Example:
     - Public service worker at national park.
   • Geographers = find useful because various types of services have different distributions and different factors influence locational decisions.

**Defining rural settlements and urbanization:**

Rural settlements – are centers for agriculture + provide a small number of services.

Urbanization – the process by which a population of urban settlements grow.

**Guidance for questions requiring written answers**

Note that in the case of Learning Unit 6, the examination guidance does not
distinguish between 6-mark and 4-mark questions. Possible topics to be covered by questions include:

**Differences that exist in development between developing and developed nations:**

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Developing countries</th>
<th>Developed countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Measures average income through complex index = annual gross national income per capita at purchasing power parity. - Gross national income (GNI) = value of input of the goods and services produced in a county per year – including money that leaves and enters the country. - Gross domestic product = input of goods and services produced in a year by a country, but doesn’t account for money that leaves and enters the country.</td>
<td>• Annual gross national income per capita = around $5,000. • Lower average incomes.</td>
<td>• Annual gross national income per capita = around $40,000. • Higher average incomes.</td>
</tr>
<tr>
<td>Economic structure:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Jobs fall into 3 categories: 1. Primary sector. (Including agriculture.) 2. Secondary sector. (Including manufacturing.) 3. Tertiary sector. (including services.)</td>
<td>• Higher share of primary + secondary workers + smaller share of tertiary.</td>
<td>• Average per capita income = higher, because people earn their living by different means. • People freed from the task of growing their own food = they can work in secondary + tertiary sector.</td>
</tr>
<tr>
<td>Productivity:</td>
<td>• Less productive. • Can’t produce as much as developed countries, because of the lack of equipment, tools and machines.</td>
<td>• More productive. • Produce more with less effort because they’ve access to more machines, tools and equipment to perform more work.</td>
</tr>
</tbody>
</table>
of raw materials and energy.

<table>
<thead>
<tr>
<th>Education:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- The duration what a learner spends in school = important because they learn more.</td>
<td>• Completes less years of school (average 6 years).</td>
<td>• Completes more years of school. (average 11 years)</td>
</tr>
<tr>
<td>- Pupil/teacher ratio = the amount of children in a class per teacher.</td>
<td>• Pupil/teacher ratio = high.</td>
<td>• Pupil/teacher ratio = lower</td>
</tr>
<tr>
<td>- Literacy rate = percentage of country’s people who can read or write.</td>
<td>• Literacy rate = lower</td>
<td>• Literacy rate = high</td>
</tr>
</tbody>
</table>

The two development paths available to developing countries in order to further their economic development:

1. Development through self-sufficiency:

Characteristics:

- Investment = spread equally as possible across country’s economy.
- Pace of development = may be modest, but system = fair because residents and enterprises = share the benefits of development.
- Reducing poverty = takes precedence over encouraging a few people to become wealthy.
- Fledgling businesses = isolated from competition with large international corporations.
- Import of goods = limited by barriers such as:
  - tariffs
  - quotas
  - licenses.

Shortcomings:

- Self-sufficiency protected inefficient industries:
  Businesses = sell all they made at high government-controlled prices to customers from long waiting lists. Had little incentive to improve quality, lower production costs, reduce prices + increase production. Nor did they keep track of technological changes elsewhere.
- Large bureaucracy was needed to administer the controls:
  Complexed business system encourage abuse and corruption. Aspiring entrepreneurs found that struggling to produce goods or offer services was less rewarding financially than advising others how to get around the complex regulations.

Examples:
• India.

Barriers to trade:
- To import = foreign companies had to secure a license that had to be approved by government agencies.
- Importer with license = restricted on how much he’s allowed to import.
- Heavy taxes on imported goods = made the price more to consumers.
- Indian money = not be converted to other currencies.
- Businesses = require government permission to sell new product, modernize factory, expand production, set prices, hire or fire workers and change job classification of current workers.

2. Development through international trade:

Characteristics:

W.W. Rostow = 5 stage model of development in 1960:

1. Traditional society:
   - Very high percentage of people = agriculture and high percentage of national wealth allocated to what he called “non-productive” activities, such as military and religion.
2. Preconditions for takeoff:
   - Elite group of well-educated leaders initiates investment in technology + infrastructure, such as water supplies and transportation systems, designed to increase productivity.
3. The takeoff:
   - Rapid growth is generated in a limited number of economic activities, such as textiles or food products.
4. Drive to maturity:
   - Modern technology, previously confined to a few takeoff industries, diffuses to a wide variety of industries.
5. Age of mass consumption:
   - Economy shifts from production to heavy industry, such as steel and energy, to consumer goods, such as motor vehicles and refrigerators.

Shortcomings:

• Local hardships:
  Building up a handful of takeoff industries = forced some developing countries to cut back on production of food, clothing and other necessities for their own people.
• Slow market growth:
  Developing countries = trying to take advantage of their low-cost labor = find that markets in developed countries = growing more slowly than when the ‘four dragons’ used this strategy.
• Low commodity prices:
Some developing countries have raw materials sought by manufactures and producers in developed countries. Sales = development of developing countries.

Examples:

• The “Four Dragons”:
  - South Korea
  - Singapore
  - Taiwan
  - British colony of Hong Kong
- Also known as the “four little tigers” and “the gang of four”.
  - Developed by producing a handful of manufactured goods, especially clothing and electronics that depended on low labor costs.

• Petroleum-rich Arabian Peninsula countries:
- Once worlds least developed countries = transformed overnight into some of the wealthiest due to escalating petroleum prices during the 1970’s.

**Differences that exist between commercial and subsistence agriculture as well as between commercial and sustainable agriculture:**

<table>
<thead>
<tr>
<th>Commercial:</th>
<th>Subsistence:</th>
<th>Sustainable/organic:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Large farms</td>
<td>• Small farms</td>
<td>• Rely on sensitive land management – protects soil in parts through ridge tillage.</td>
</tr>
<tr>
<td>• Small percentage of farmers</td>
<td>• High percentage of farmers</td>
<td>• Limited use of chemicals – control weeds without chemicals.</td>
</tr>
<tr>
<td>• Many machines</td>
<td>• Few machines</td>
<td>• Controlling weeds without chemicals can be expensive + time consuming.</td>
</tr>
<tr>
<td>• Expensive business</td>
<td>• They try to farm as cheap as possible.</td>
<td>• Integrate the growing of crops + raising of livestock as much as possible at the level of the individual farm.</td>
</tr>
<tr>
<td>• Expand their holdings by renting other farmers grounds</td>
<td>• Almost never rent farms from other farmers, because it’s too expensive.</td>
<td>• The animals consume crops grown on the farm + aren’t confined in small pens.</td>
</tr>
<tr>
<td>• Use methods to produce higher crop yields, like different types of fertilizers, and farming practices.</td>
<td>• Use farming practices which their past generations used.</td>
<td>• Feed costs = largest single variable cost in their operation.</td>
</tr>
</tbody>
</table>
Explaining urbanisation in relation to developing countries:

Urbanization – the process by which a population of an urban settlement grows.

Has 2 dimensions:
1. Percentage of people in cities:
   • A large percentage of people living in urban areas = measured by country’s level of development.
2. Number of people in cities

<table>
<thead>
<tr>
<th>Developed:</th>
<th>Developing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of people in cities:</td>
<td>-Three-fourths of people in urban settlements.</td>
</tr>
<tr>
<td>Number of people in cities:</td>
<td>-Higher percentage of urban residents.</td>
</tr>
</tbody>
</table>

Various types of services that can be found in most developed countries:

Service – any activity that fulfils a human want or need and returns money to those who provide it.

Three types of services:

1. Consumer services:
   • Provide services to individual customers who want them + can afford them.
   • Four major types of consumer services:
     - Retail
     - Education
     - Health – hospital staff, clinics, nursing homes.
     - Leisure – recreation + entertainment.

2. Business services:
   • Facilitate other businesses.
   • 3 main types:
     - Professional services – engineering, management + law
     - Financial services
     - Transportation services

3. Public services:
   • Provide security and protection for citizens + businesses.
   • Example:
     - Public service worker at national park.
   • Geographers = find useful because various types of services have different distributions and different factors influence locational decisions.
Test-yourself:

1. Which one of the following countries has the highest known inequality adjusted HDI? (Section B, pg 223)
   (1) Argentina
   (2) Botswana
   (3) Germany
   (4) Vietnam

2. Which one of the listed economic sectors or combinations thereof made an almost equally significant contribution to economic growth in both developed and developing countries during the late 1980s? (Section B, pg 225)
   (1) primary and secondary sectors
   (2) tertiary sector
   (3) secondary sector
   (4) secondary and tertiary sectors

3. Which one of the following characteristics are generally not associated with a developed country? (Section B, pg 226)
   (1) less than 10 expected schooling years
   (2) high literacy rate
   (3) high healthcare expenditure
   (4) high Human Development Index value

4. The reason why the population in developed countries have a wider spectrum of food choices is because … . (Section B, pg 248)
   (1) developed countries have favourable climates where any food source can be cultivated
   (2) developed countries have the infrastructure to import more varieties of food than developing countries
   (3) people in developed countries do not conform to social and religious restrictions in terms of food consumption
   (4) governments of developed countries do not impact hugely on the international food trade

5. Which one of the following statements on the cultivation of crops is false? (Section B, pg 248-249)
   (1) Wheat is the principal cereal grain consumed in Europe and North America.
   (2) Maize, the leading crop in the world, is grown exclusively for human consumption.
   (3) Rice is the principal cereal grain consumed in the East, South and Southeast
Asia.
(4) Some sub-Saharan African countries depend on the production of millet, cassava, plantains and sweet potatoes.

6. ... experienced the greatest increase in their global share of steel production between 1980 and 2000, while ... experienced the greatest decrease in their global share of steel production over the same period. *(Section B, pg 821)*

(1) **China; United States**  
(2) China; Japan  
(3) United States; Russia  
(4) Japan; Russia

7. Global textile and apparel production is *predominantly* located in *(Section B, pg 288-289)*

(1) **Asia**  
(2) North America  
(3) North Africa  
(4) Europe

8. The maximum distance that a consumer is willing to travel for a service is known as its *(Section B, pg 299)*

(1) threshold  
(2) central place  
(3) **range**  
(4) market

9. Which factors are used to identify a city as a world city? *(Section B, pg 304)*

(1) **Cultural, political, infrastructural and economic**  
(2) Only political and economic  
(3) Only infrastructural and economic  
(4) Only cultural, infrastructural and economic

10. According to *figure 12.5.1 (Section B: page 304)*, Cape Town is classified as a … level city. *(Section B, pg 304)*

(1) Alpha+  
(2) **Gamma+**  
(3) Beta+  
(4) Alpha-