Agriculture

Agriculture = the use of the land to produce food products for human and animal consumption and raw materials for industry

Agriculture
- Agriculture is important because:
  - it provides employment (about 40-45% of the world´s labour force)
  - food production continues to rise and yields per hectare have increased
  - trade in agricultural products has escalated
  - farmland accounts for about 36% of global land use
  - it provides the basis of many manufacturing and service industries such as food processing, agricultural equipment, agricultural inputs (seeds, fertilizers, etc.) and a variety of services (financial, veterinary, marketing, transport)

Developed countries
- Importance of farming has declined in terms of employment
- Contribution to GNP is up to 10%

Economically LDCs
- Agriculture employs a major part of population <=> little industry
- Contribution to GNP is up to 50% (Ethiopia 51%, Ghana 45%, Tanzania 56%)

- **Agriculture = primary industry** => provides raw materials for the processing and manufacturing industry
  - e.g. milk for dairy industry
  - e.g. hemp/cotton/wool for clothing industry
  - e.g. wheat for food industry

- Basic input in agriculture is <u>soil</u> (land)
  <=> we plant the seeds into the soil, not to water, etc.

Farming as a system
Farming as a system
- a farm = a system

- *Inputs* into the system
- *Processes* taking place in it
- *Outputs* from the system
  - e.g. profits can be reused back in the system

Farming as a system

- **Physical inputs**
  - Climate
  - Amount and season of rain
  - Summer and winter temperature
  - Growing season
  - Relief
  - Soils and drainage

- **Human and economic inputs**
  - Labour
  - Rent
  - Transport costs
  - Machinery
  - Fertilisers and pesticides
  - Government control
  - Seeds – livestock
  - Farm buildings
  - Energy (electricity)

- Farming systems vary within and between countries because of different:
  - Physical conditions
  - Human conditions
  - Economic conditions
    - e.g. rice farming in India is quite different from the system of mixed farming in England

- Farmer as a decision maker
  - has to decide which crops to grow or which animals to rear => decision based on
    - **physical factors**
    - **human factors**
    - **economic factors**
  - chooses the type of farming <u>most suitable to the conditions</u>
  - using the <u>most efficient method</u>
  - to gain <u>maximum profit</u>

Types of farming

Types of farming

- **Arable farming** = ploughing of the land and the growing of crops
  - e.g. wheat, barley, peas, sugar beet, carrot, celery
- **Pastoral farming** = rearing animals
  - e.g. cattle, sheep, chicken

- **Mixed farming** = Arable + Pastoral farming together
  - **Subtypes of farming:**
    - **Dairy farming**
    - **Hill sheep farming**
    - **Horticulture**

- **Intensive farming** = high inputs and high yields per unit area
  - e.g. wheat production in south Slovakia (5t/ha) or battery hen production ("battery farm")
- **Extensive farming** = low inputs and low yields (large areas)
  - e.g. free range chicken production in economically LDCs

- **Nomadic farming** = farmers move seasonally with their herds
  - e.g. pastoralists in Kenya
- **Sedentary farming** = farmers remain in the same place
  - e.g. dairy farm in Europe

- **Commercial farming** = products are sold to make a profit
  - e.g. market gardening in Netherlands
- **Subsistence farming** = products are consumed by the cultivators
  - e.g. cultivation by tribes in Amazonian rainforest

  - What is the interaction between commercial/subsistence farming and development of a country?
    - the more developed country = the more commercial farming
    - the less developed country = the more subsistence farming

Keywords
- inputs, processes, outputs, profits, incomes, expenditures, reinvestments, yields
- cultivating, growing crops, rearing animals, storage, drainage, irrigation (drainage), seeds, livestock, fertilisers, pesticides
- arable/pastoral/mixed farming, dairy/hill sheep farming, commercial/subsistence farming, intensive/extensive farming, nomadic/sedentary farming
- horticulture, graze (grazing), cattle, sheep, wheat, barley, peas, sugar beet, carrot, celery, herd, hemp, cotton, wool
- labour force (workforce), raw materials, (un)employment, food production, farmland