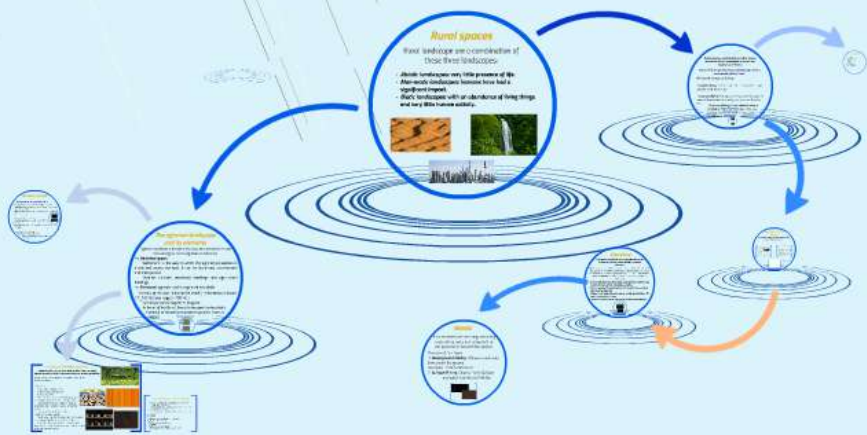


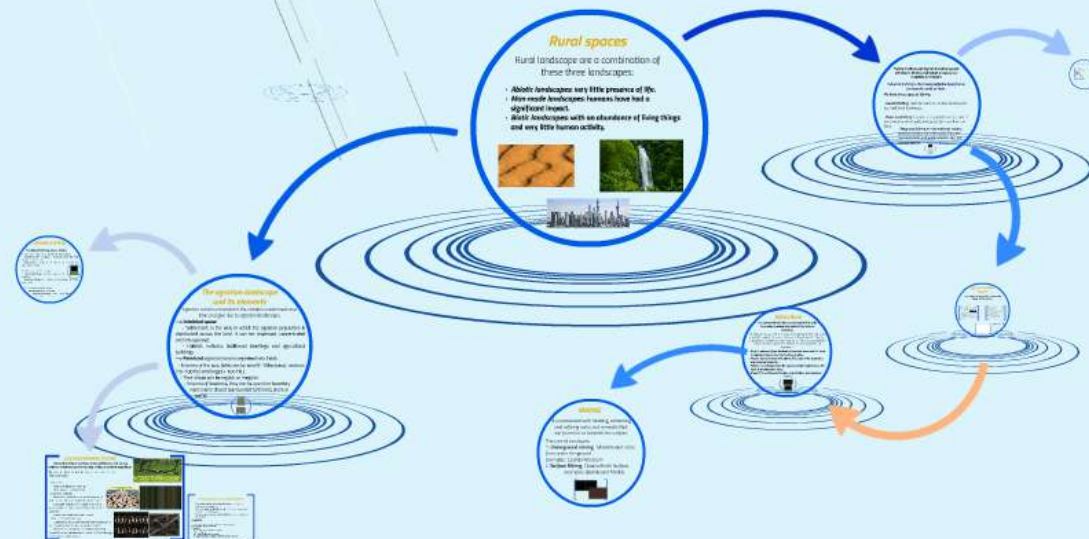
# Unit 2: The primary sector. Agrarian activities

The primary sector comprises economic activities devoted to obtaining resources directly from nature.



# Unit 2: The primary sector. Agrarian activities

The primary sector comprises economic activities devoted to obtaining resources directly from nature.



# *Rural spaces*

Rural landscape are a combination of these three landscapes:

- ***Abiotic landscapes:*** very little presence of life.
- ***Man-made landscapes:*** humans have had a significant impact.
- ***Biotic landscapes:*** with an abundance of living things and very little human activity.



# Agrarian activity. Factors

There're two main factors that determine the type of rural landscapes

## Physical Factors

--> **Climate:** all types of plants need a certain number of sunlight and can tolerate specific maximum and minimum temperatures, precipitation and winds. Furthermore, different **crops** adapt better to different conditions. Some require more humidity (rice) and others very high temperatures (sugar and coffee).



--> **Relief of the land:** farmers prefer to grow their crops on plains and in valleys, but they can farm into mountainous terrain with the construction of hillside terraces. Also, above a certain height, low temperatures prevent crops from growing.



--> **Soil and vegetation:** the soil has important effects on crops, as the minerals it contains provide nutrients needed by plants. Other important characteristics are: depth, texture, porosity, acidity and the vegetation it has before farming.



## Human factors

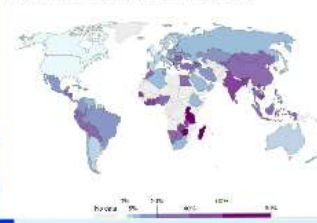
--> **Demographic pressure:** population increase has led to a rise in the surface area of land dedicated to crops and pastures. That results in *deforestation and overexploitation*.

--> **Technological development:** in advanced societies, traditional farming tools are combined with modern tools such as tractors, harvesters and milking machines. Referred to farming techniques, chemical fertilisers and pesticides are used, crops are irrigated with advanced systems and they are protected in greenhouses.

--> **Economic and social organisation:**

- Agrarian economies: subsistence economies produce enough to cover their food needs. Market economies produce food in order to sell it and tend to specialise in one crop or type of livestock.
- Social organisation: land property can be private or collective and land exploitation can be direct or indirect.
- Agrarian policies: implemented by governments.

Share of the labor force employed in agriculture, 2015



Pages: 106-108

# Physical Factors

--> **Climate:** all types of plants need a certain number of sunlight and can tolerate specific maximum and minimum temperatures, precipitation and winds. Furthermore, different **crops** adapt better to different conditions. Some require more humidity (rice) and others very high temperatures (sugar and coffee).



--> **Relief of the land:** farmers prefer to grow their crops on plains and in valleys, but they can farm into mountainous terrain with the construction of hillside terraces. Also, above a certain height, low temperatures prevent crops from growing.



--> **Soil and vegetation:** the soil has important effects on crops, as the minerals it contains provide nutrients needed by plants. Other important characteristics are: depth, texture, porosity, acidity and the vegetation it has before farming.



# Human factors

--> **Demographic pressure:** population increase has led to a rise in the surface area of land dedicated to crops and pastures. That results in *deforestation and overexploitation*.

--> **Technological development:** in advanced societies, traditional farming tools are combined with modern tools such as tractors, harvesters and milking machines. Referred to farming techniques, chemical fertilisers and pesticides are used, crops are irrigated with advanced systems and they are protected in greenhouses.

--> **Economic and social organisation:**

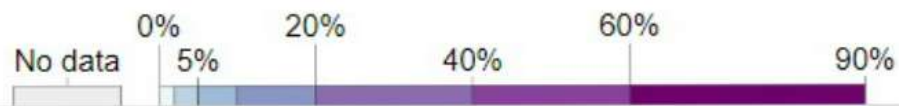
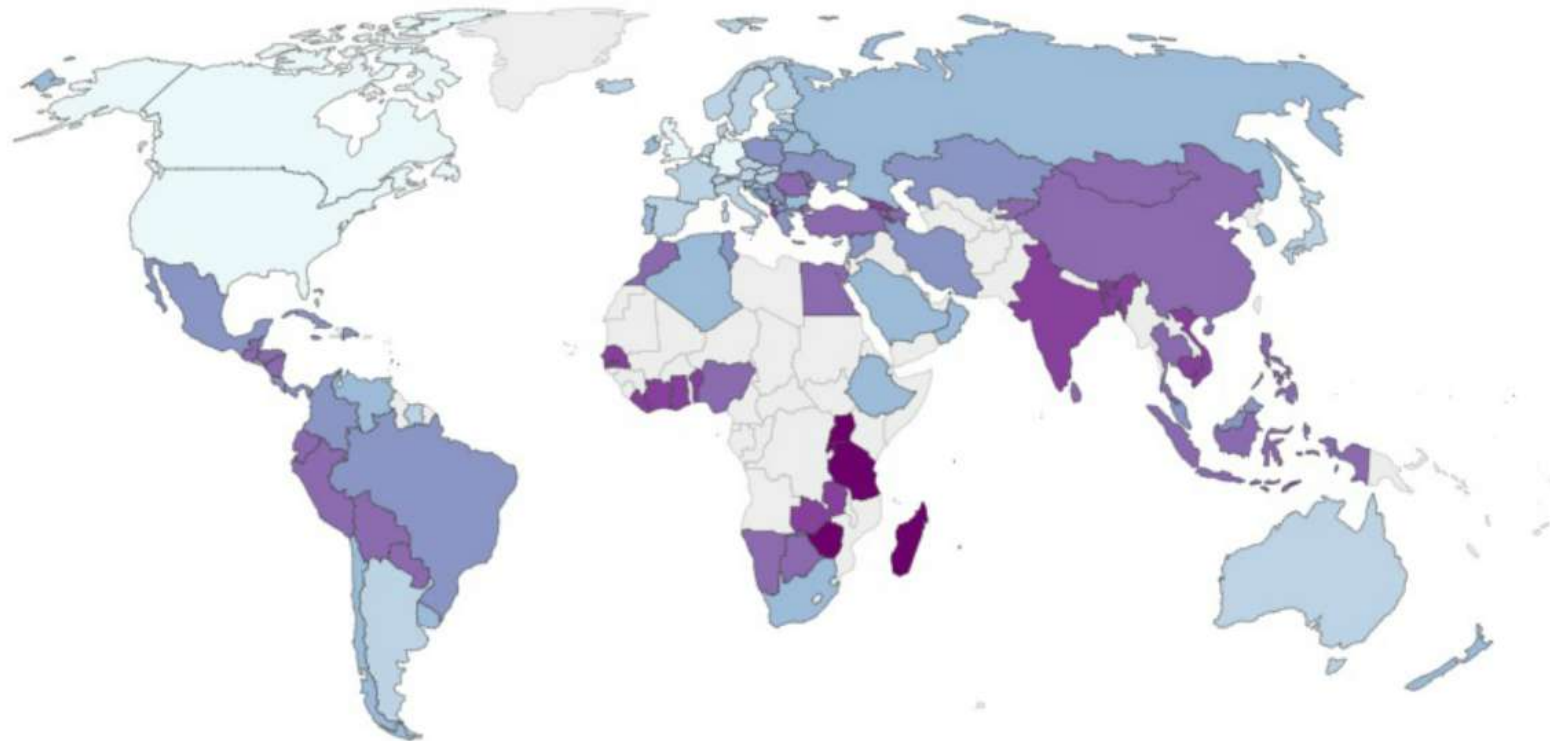
- Agrarian economies: subsistence economies produce enough to cover their food needs. Market economies produce food in order to sell it and tend to specialise in one crop or type of livestock.

- Social organisation: land property can be private or collective and land exploitation can be direct or indirect.

- Agrarian policies: implemented by governments.

# Share of the labor force employed in agriculture, 2015

Share of persons of working age who were engaged in any activity to produce goods or provide services for pay or profit in the agriculture sector (agriculture, hunting, forestry and fishing).



# *The agrarian landscape and its elements*

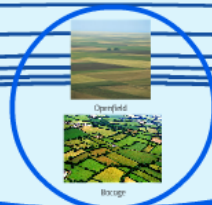
Agrarian activities transform the natural environment over time and give rise to agrarian landscapes.

## **--> Inhabited space:**

- Settlement: is the way in which the agrarian population is distributed across the land. It can be: dispersed, concentrated and interspersed.
- Habitat: includes traditional dwellings and agricultural buildings.

## **--> Farmland:** agrarian land is organised into fields.

- In terms of the size, fields can be small (- 10hectares), medium (10- 100Ha.) and large (+ 100 Ha.).
- Their shape can be regular or irregular.
- In terms of locations, they can be open (no boundary markers) or closed (surrounded by fences, trees or walls).







Openfield



Bocage

# FARMING SYSTEMS

## The different farming systems include:

There're two types according to the variety of species:

- **Polyculture:** different species. The production is intended to supply the population.
- **Monoculture:** a single crop. The production is intended for sale on the market.

There're two different systems:

- **Intensive farming:** the land is used to its full potential.
- **Extensive farming:** uses small inputs of labor, fertilizers, and capital

There're two main techniques:

- **Dryland:** use only rain water
- **Irrigation farming:** water is supplied to crops.





## LIVESTOCK FARMING SYSTEMS

**Livestock farming is a primary sector activity based on raising animals in order to use them for food, textiles or as lab in agriculture.**

We can classified livestock farming systems based on the following factors:

- *Farm size:*

Extensive livestock farming  
Intensive livestock farming

- *Livestock mobility:*

Nomadic: livestock is continually moving in order to provide animals with fresh pastures.

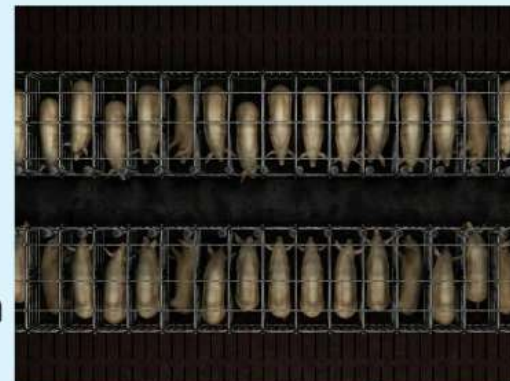
Seasonal migratory: livestock is moved on a seasonal basis, between summer and winter pastures.

Sedentary: livestock doesn't move.

- *Type of diet and enclosure:*

Confined: or industrial livestock farming to obtain the maximum yield to be sold on the market.

Unconfined: or organic livestock farming that respects the environment and animal welfare although production output is lower.



## ***THE MODERNISATION OF LIVESTOCK FARMING***

- **The mechanisation of the livestock farms:** leading to the intensification of production.
- **The introduction of foreign breeds:** that produce more meat or milk than native breeds.
- **The development of specialised farms:** breed one single type of livestock

### **CONSEQUENCES**

- > **Positives:** an increase in meat production - an improvement in people's diets in developed countries.
- > **Negatives:**
  - **The use of hormones for livestock growth.**
  - **Poor quality feed.**
  - **Poor living conditions for the animals.**
  - **The spread of disease, including mad cow disease and avian flu.**

# FISHING

**Fishing involves catching fish and other aquatic animals for direct consumption or use as raw materials for industry**

**Industrial fishing is the most profitable type from a commercial point of view.**

**We have three types of fishing:**

- **Coastal fishing:** near the coast. It's a daily activity and use traditional techniques.
- **Deep-sea fishing:** in areas a long way from the coast. It uses medium-sized boats and go out for more than ten days.
- **Deep-sea fishing in international waters:** hundred of miles from the coast. They use one large factory ship and seasons can last several months.





# Silviculture

**It is concerned with the use of woodland in order to provide food and raw material for various industries.**

The main use of woodland is to harvest the wood from trees. But forests also fulfil important environmental roles, as they absorb CO<sub>2</sub> from the atmosphere and reduce the greenhouse effect. They also add humidity to the atmosphere, protect the soil from erosion and contain rich biodiversity.

- **Cork: is obtained from the bark of cork oak trees and it's used to manufacture cork for the bottles of wine.**
- **Resins: secreted by certain plants. It's used in the cosmetics and chemical industry.**
- **Rubber: is extracted from the sap of certain tropical trees. It's used to manufacture tyres.**
- **Wood: It's used to construction and furniture manufacture.**

Overexploitation + clearing + forest fires = DEFORESTATION





**Overexploitation + clearing+  
forest fires = DEFORESTATION**



# MINING

It is concerned with locating, extracting and refining rocks and minerals that are found on or beneath the surface.

They are of two types.

1. **Underground mining:** Minerals and rocks from under the ground  
examples : Coal & Petroleum
2. **Surface Mining:** Close to Earth Surface.  
examples : Granite and Marble.





## ***GLOSSARY TIME***

**Agriculture**

**Livestock farming**

**Silviculture**

**Polyculture**

**Monoculture**

**Intensive farming**

**Extensive farming**

## Rural spaces

Rural landscape are a combination of these three landscapes:

- **Abiotic landscapes:** very little presence of life.
- **Man-made landscapes:** humans have had a significant impact.
- **Biotic landscapes:** with an abundance of living things and very little human activity.



## FISHING

Fishing involves catching fish and other aquatic animals for direct consumption or use as raw materials for industry

Industrial fishing is the most profitable type from a commercial point of view.

We have three types of fishing:

- **Coastal fishing:** near the coast. It's a daily activity and use traditional techniques.

- **Deep-sea fishing:** in areas a long way from the coast. It uses medium-sized boats and go out for more than ten days.

- **Deep-sea fishing in international waters:** hundred of miles from the coast. They use big large factory ship and seasons can last several months.



## Silviculture

It is concerned with the use of woodland in order to provide food and raw material for various industries.

The maintenance of woodlands is important for several reasons. But forests also fulfill important environmental roles, as they absorb CO2 from the atmosphere and reduce the greenhouse effect. They also add humidity to the atmosphere, protect the soil from erosion and contribute to biodiversity.

- **Cork:** is obtained from the bark of cork oak trees and it's used to manufacture corks for the bottles of wine.
- **Resin:** secreted by certain plants. It's used in the cosmetics and chemical industry.
- **Rubber:** is extracted from the sap of certain tropical trees. It's

## Agriculture activity factors

There are two main factors that determine the type of rural landscape



# Unit 2: The primary sector. Agrarian activities

The primary sector comprises economic activities devoted to obtaining resources directly from nature.

