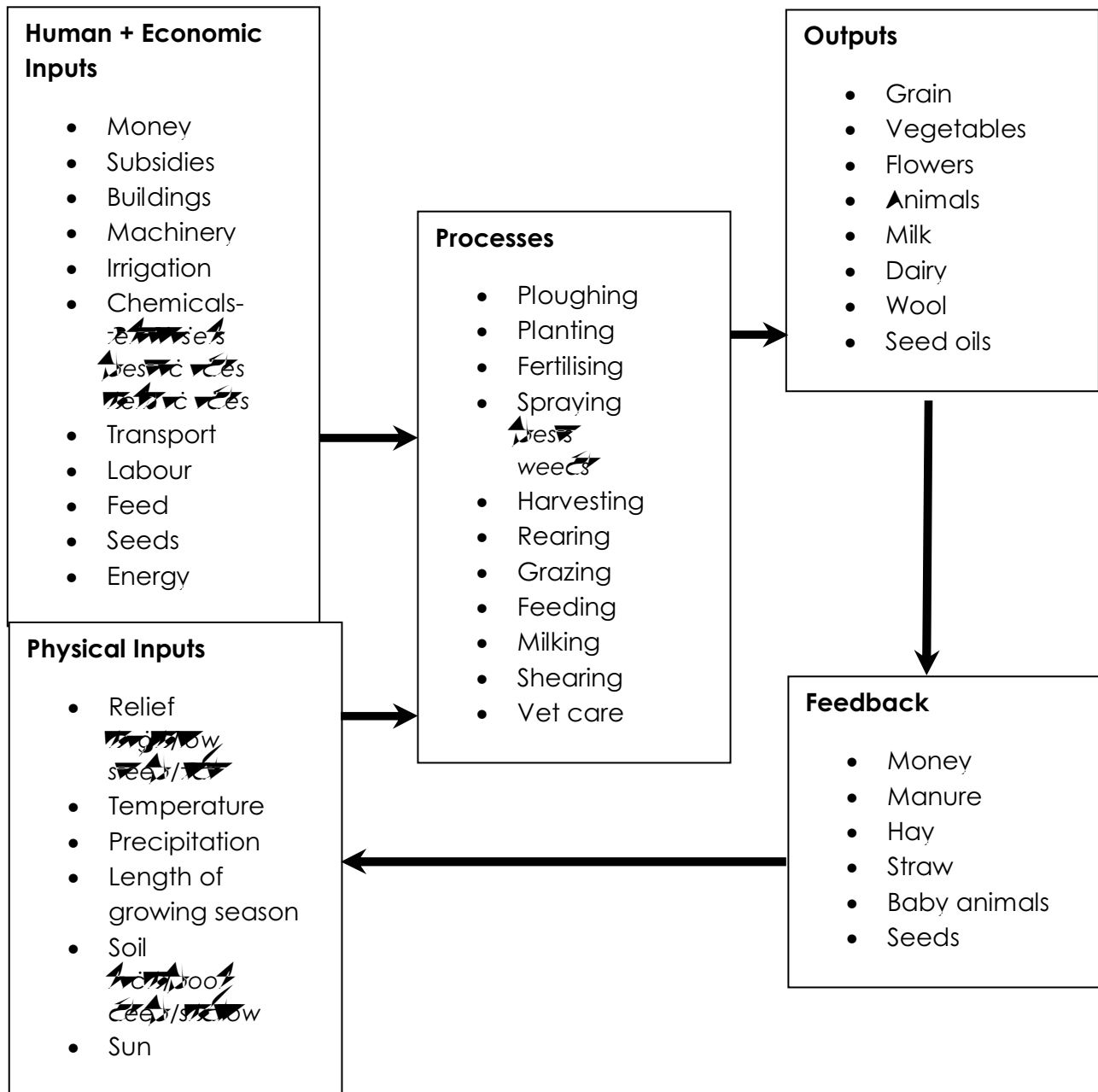


## SYSTEMS DIAGRAMS



## **TYPES OF FARMING**

### **Pastoral farming:**

keeping livestock- meat and dairy-  
specialises in rearing animals

### **Arable farming:**

growing crops  
wheat, barley, etc.

### **Mixed farming:**

both pastoral and arable  
mixed farmers often grow crops to feed their animals, so that money is saved on livestock feed

### **Intensive farms:**

needs a high level of input to achieve a high yield per hectare  
technology, fertilisers, greenhouses, machines, more labour  
e.g. rice farming in S.E. Asia

### **Extensive farms**

have a low input and output per hectare  
high yield is produced by covering large areas of often low grade land but with few workers  
e.g. a hill sheep farm- maybe only one farmer is needed to look after a large amount of sheep- do not need that much looking after

### **Subsistence farming**

where produce is mainly grown for the use of the farmer  
surplus may be sold to buy other goods  
many subsistence farmers are very poor but this is not always the case- shifting cultivation is also an example of subsistence farming

### **Commercial farming**

farming on a large-scales  
producing food to be sold

### **Market gardening**

farming using greenhouses to produce fruit and vegetables

### **Sedentary farming**

farming where the farmer remains settled in one place

### **Nomadic farming**

farming where the farmer does not stay settled in one place  
e.g. shifting cultivation

## **CHANGES TO FARMING**

- More tractors- less horses
- Machinery- eliminate back-breaking jobs  
~~Combine harvesters~~ ~~scarecrows~~ ~~chickens~~
- Farming techniques operated by computers- milking + feeding cows, rearing chickens in battery units
- Machinery gets more expensive- farmers who can afford it buy land and farms from neighbours- cost of machinery may only be recovered and justified by creating larger economic units
- Bigger fields- removal of hedgerows- combine harvesters can be used
- Decrease in numbers employed in agriculture- increased mechanisation, urbanisation and industrialisation
- Expense of buying and running a farm has increased- more are being run by food processing companies- agribusiness
- Improved yields- increase in the use of fertilisers and pesticides, better strains, faster growing seeds, improved breeds
- Organic farming- avoids the use of artificial fertiliser and pesticides and using animal manure and compost instead
- Subsidies and grants- many British farmers are only able to grow certain crops and keep certain animals because of successive governments have provided subsidies and grants
- Changes in eating habits- refrigeration and frozen food, processed and dried food, fresh fruit and vegetables, decrease in meat-eaters, increase in health foods- influence of supermarkets
- More farm diversities- petting farms, horse riding, farm visits, farm shop, selling manure, pick your own fruit, plant nursery, specialist products, camping, paint balling, B+Bs
- Increased factory farming- cuts costs

## **COMMON AGRICULTURE POLICY (CAP)**

- Governs farming in all countries in the EU
- Set up after WWII- to increase European food production by making farming more modern and efficient
- CAP worked too well
  - Farmers were given subsidies (assistance money) to encourage them to produce more
  - The EU guaranteed a standard price for farmers' products regardless of market forces or the price of the same product outside Europe- protected farmers from cheap imports from abroad
  - Subsidies and guaranteed prices meant the EU farmers ended up damaging the environment and producing too much food
- **Milk Quotas**- limited the amount of milk each farmer was allowed to produce, and set fines for milk produced over this limit
- **Set aside**- the EU pays farmers a subsidy to leave land uncultivated to reduce overall production

## **THE GREEN REVOLUTION**

- Partly a plant engineering programme where new strains of crops were produced to increase yields- in LEDCs- to feed people and improve living standards
- Yields were increased in these ways:
  - Dwarf varieties can be grown closer together without blocking sunlight and are less at risk to wind damage because they're shorter
  - High Yielding Varieties (HYVs) are designed to make maximum use of fertilisers, so they have smaller root systems- makes them less reliant on fertile soil
  - HYVs are designed to withstand common diseases that can wipe out crops
  - Shorter growing seasons mean that more crops can be harvested in a year- many parts of SE Asia now get 2 or 3 harvests a year instead of 1
  - Machinery such as tractors and ploughs were introduced

- **Successes:**

- 3x output of crop yields
- The increased output enabled surplus to be sold and profits were used to buy more land and to increase standards of living and quality of life
- Farmers with increased yield have higher income and a better standard of living
- Successful areas became richer with more money invested in schools, clinics etc.
- Transport systems have improved in some rural areas
- HYVs have led to a more varied diet
- Technology such as irrigation has increased
- New industries making fertilisers and pesticides have developed in rural areas

- **Failures:**

- New machinery was expensive and required more money for repair and upkeep with many unable to afford it
- Where machinery could be bought, job losses resulted through a reduced need for manual labour
- Many poor farmers could also not afford either the new IR-8 rice seeds or the fertilisers and pesticides required
- In areas where increased levels of fertilisers and pesticides were used environmental pollution resulted
- Eutrophication- nitrates from fertilisers in rivers
- Increased irrigation- salinisation- build up of salt in the soil
- HYVs require expensive fertilisers

## **THORN PARK FARM, NORTH YORKSHIRE- COMMERCIAL FARM**

### **MEUC**

- Dairy farm, west of Scarborough

- Located in an undulating valley, surrounded by hills- provide shelter from prevailing winds which blow from the North Sea
- Run by the Wilson family- rent the land from Scarborough Borough Council
- **Reasons to become dairy farmers:**
  - The climate was mild, but too wet
  - The soils were too heavy to grow most arable crops
  - The farm is too small to grow crops profitably
  - Good grass growing area
- **Reasons to give up dairy farming:**
  - Beef prices had fallen badly because of BSE/Foot and Mouth disease
  - Had to cut down on amount of milk being produced to prevent over-production- milk quotas

## **INTENSIVE WET RICE FARMING IN INDIA- SUBSISTENCE FARMING**



- 5 month growing season
- 21 degrees Celsius or more
- Monsoon rain
- Flat land
- Large labour force
- **Problems:**
  - Flooding- provide water and fertile silt to grow the rice but sometimes disaster strikes when the floods are so severe that they destroy the rice crop
  - Drought- in some years the monsoon rain fails
  - Shortage of land and growing population- many farms are too small to support the family, and the ever-increasing population makes the situation worse because food shortage is a problem
  - Little use of machinery or modern methods

- The majority of the best farmland is held by a few wealthy landowners
- Many of the poorer farm labourers have no land at all and work in a latifundia system where they rent small plots, giving away 60% of their outputs to the landlord and in addition having to work on the landowner's land for free

## **LOCATION OF INDUSTRY**

- **Decision makers:**

- Entrepreneurs
- Private firms
- TNCs
- National government
- Local planners

- **Physical factors:**

- Raw materials- steel-located close to iron ore/coal fields
- Power- close to coal fields/rivers
- Natural route- river/natural harbour
- Site- river/above level of flooding

- **Human factors:**

- Labour- availability and skills
- Capital- money available
- Markets- located near where it will be sold- saves transport costs
- Transport- canals, roads, railways, airports
- Economies of scale- cheaper to manufacture on a larger scale
- Government policies- planning restrictions or can encourage by offering subsidies and grants
- Technology
- Leisure facilities- nice surroundings- attracts best workers

**FOOTLOOSE INDUSTRY** = an industry that can be placed and located at any location without effect from factors such as resources or transport

### **ARGOS DISTRIBUTION CENTRE, ACTON GATE, STAFFORD**

- The Argos distribution centre, situated at Acton Gate on the SE edge of Stafford by J13 of the M6 (Staffordshire, W Midlands)
- Involved in the transporting of goods to Argos stores around the country
- It has an excellent location as it has easy access to the motorway and a number of main access roads (J13 of the M6, crossed by the A449). This makes it easier to transport goods efficiently and also provide good access to the site by workers
- The distribution centre requires a large number of workers and there is a plentiful supply in nearby Stafford
- Acton Gate also provides a very central location, giving good access to Argos's regional bases, meaning drivers can drive throughout the night but stay within permitted working hours
- The site itself is ideal as it is a large flat Greenfield site, providing plenty of room for storage, transport and office facilities
- However, unfortunately expansion is constrained somewhat by the surrounding transport routes, being bordered by the railway line, M6 and A449

### **FACTORS INFLUENCING THE GROWTH OF TOURISM**

- Early retirement
- 4 weeks paid holiday
- Cheap flights
- More winter destinations- southern hemisphere- due to large fuel tanks on planes
- More investment in tourist facilities and attractions
- More disposable income
- Package holidays + internet planned trips
- Media/TV
- Family visits due to global immigration



# NORFOLK BROADS-FOUNDRY

- **Aims:**

- To conserve the many natural habitats of the Broads and the history and heritage
- To provide access and encourage the use of the Broads for quiet enjoyment
- To provide the local population with incomes from tourism and other activities

- **Cloudy lifeless water and thick mud at the bottom**

caused by Eutrophication from intensive farming and sewage pollution- causing the growth of algae- dead algae sinks

~~nae eee wee o nae ee~~  
~~nae sewce woe~~  
~~nae ee wee hee o ee ee~~  
~~nae o nae~~

- Banks eroding up to 3m in 10 years

caused by death of vegetation on banks, and the motorboats' waves wash banks away

eny for personal tendency, protection of ecclesies and the welfare  
 of the living trees and above  
 a number of new trees grow up  
 looking for places to be the waves of the  
 stream to be the waves of the

- **Holiday industry has put pressure on the quiet riverside villages and waterways**

caused by the building of high buildings, kiosks, arcades, chalets, overcrowding and traffic

Improve the efficiency of the process by using the following steps:  
 1. Identify the key components of the process.  
 2. Analyze the current process flow.  
 3. Identify areas for improvement.  
 4. Implement changes to the process.  
 5. Monitor the results of the changes.  
 6. Make adjustments as needed.

- **Holiday accommodation**

caused by demand for houses, second homes

building accommodation which doesn't blend with the surroundings

people not spending their whole lives there- only holidays- ghost town?

not helping local economy because tourists bring own food, etc- not using local shops

restrictions

to support local businesses

encourage people to stay in local businesses

## **MENORCA-TOURISM**

- Menorca is one of the Spanish Island Balearic Islands located in the Mediterranean Sea
- Menorca has become an important tourist destination as it has a warm Mediterranean climate with an average temperature of 24°C in the summer and little rain
- It is within 2 hours of the UK and cheap flights from airlines such as Easyjet have increased the number of tourists
- There have been many new developments for tourists including a growth in package holidays and the opening of a new airport with longer runway
- Menorca has a varied and beautiful landscape providing many attractions for tourists including an uneven and rugged coastline and in the south of the island sandy beaches
- A wide range of watersports are available such as scuba-diving and water skiing, and other activities such as cycling and horse riding also attract tourists
- Menorca has a number of strategies in place to reduce the potential damage caused by tourism
- Restrictions on hotel development have been put in place in Menorca to reduce the impact of tourism
- There is now a height restriction of 2 storey's on hotels within 250km of the coast
- There are tight planning permission regulations and some areas are not allowed to be built on and are to remain undeveloped
- The island has been declared a biosphere reserve and it is protected with restricted access to some areas to protect wildlife
- To protect the local traditional language (Menorqui), all signs are in the local language

- In cases where foreign words are used to advertise to tourists, organizations may be fined
- A proper path is being built around the coastline to promote quiet recreation and reduce the impact of trampling
- Schools are also raising environmental awareness through targeted education programmes to show the need for protecting remaining natural resources

## **KENYA - TOURISM**

- Savanna
- Beaches
- Big game animals
- Coral reefs
- Mountains and lakes
- Tropical climate
- Safari tours
- National parks
- Game reserves
- Cultures- crafts, dancing, festivals, way of life, tribes- Masai
- Conservation projects
- Hot air balloons
- Water sports
- Glass bottom boat tours
- Kenya, in East Africa relies heavily on tourism which is its biggest earner of foreign exchange with over 1 million visitors per year and over £50 million earned in tourism spending
- Tourism has created all year round jobs for people and has helped develop people's business skills

- Tourism has also stimulated farming by creating a demand for local food. In addition the natural environment has benefited through the creation of national parks (such as Nakuru) to protect the countries natural assets
- However there is some leakage of income and a lot of the money paid for holidays to foreign owned tour companies never reaches Kenya
- Large volumes of tourists can affect the environment. In parks such as the Maasai Mara, large numbers of safari minibuses cause soil erosion and disturb the animals, whilst in coastal areas such as Mombasa, unique coral reef ecosystems are being destroyed
- In some areas differences in culture between the locals and tourists have become an issue and there has been an increase in drugs and crime.