

## FARM EQUIPMENT

**Farm equipment** is any kind of machinery used on a farm to help with farming. The best-known example is a tractor. There are also many other farm implements.

### Traction and power

- **A tractor** is a farm vehicle. Agricultural implements may be towed behind or mounted on the tractor and a tractor may also provide a source of power if the implement is mechanized. A farm tractor is used for pulling or pushing agricultural machinery or trailers, for ploughing, tilling, disking, harrowing, planting, and similar tasks.

### Soil cultivation

- **A cultivator** is a farm implement for stirring and pulverizing the soil before planting or to remove weeds and to aerate and loosen the soil after the crop has begun to grow. It is powered by a tractor and stirs the soil, usually to a greater depth than does the harrow (which is usually not powered). Many are equipped with hydraulic wings that fold up to make road travel easier and safer. Similar but much smaller machines are used for gardening.
- **A plough (in US: plow)** is used for initial cultivation of soil in preparation for sowing seed or planting. The primary purpose of ploughing is to turn over the upper layer of the soil, bringing fresh nutrients to the surface, while burying weeds and the remains of previous crops, allowing them to break down. It also aerates the soil, and allows it to hold moisture better. In modern use, a ploughed field is typically left to dry out, and is then harrowed before planting.
- **(A set of) harrows** is an implement for cultivating the surface of the soil. It is different in its effect from the plough, which is used for deeper cultivation. Harrowing is often carried out on fields to follow the rough finish left by ploughing operations. The purpose of this harrowing is to break up lumps of soil and to provide a finer finish, a good soil structure that is suitable for seeding and planting operations. Harrowing may also be used to remove weeds and to cover seed after sowing. There are nominally three types of harrows: spike harrows, drag harrows, disk harrows.
- **A rotary tiller**, also known as a **rototiller**, **rotavator**, **rotary hoe**, **power tiller**, or **rotary plough** (in US: plow), is a motorised cultivator that works the soil by means of rotating tines or blades. Rotary tillers are either self propelled or drawn as an attachment behind a tractor.

### Planting

- **A broadcast seeder** (alternately: broadcast spreader or fertilizer spreader) is a tractor implement commonly used for spreading seed, lime or fertilizer.
- **Seed drill – grain seeder**  
It is a tool that is used in crop sowing / planting. Its purpose is to sow the seeds evenly over the entire surface. A seeder needs a machine that pulls it because it is not self-propelled. Row spacing and the depth of sowing can be controlled.

## Fertilizing & Pest Control

- **A fertilizer spreader** (see broadcast spreader)
- **A manure spreader** is an agricultural machine used to distribute manure over a field as a fertilizer. A typical (modern) manure spreader consists of a trailer towed behind a tractor with a rotating mechanism driven by the tractor's power.
- **A slurry tank** is a trailer with a tank and pump which is used for slurry (combination of manure and water) to fertilize the fields. If we fertilize fields, we get more crop at the end of the season.
- **A sprayer** is a piece of equipment that applies herbicides, pesticides, and fertilizers to agricultural crops. Sprayers range in size from man-portable units (typically backpacks with spray guns) to self-propelled units similar to tractors.

## Irrigation

- **Centre irrigation:** Irrigation is the artificial application of water to the soil usually for assisting in growing crops. In crop production it is mainly used in dry areas and in periods of rainfall shortfalls, but also to protect plants against frost. Irrigation the opposite process of drainage, which is the natural or artificial removal of surface and sub-surface water from a given area.



## Harvesting / post-harvest

- **A combine harvester**, or simply **a combine**, is a machine that *combines* the tasks of harvesting, threshing, and cleaning grain crops. The objective is the harvest of the crop; corn (maize), soybeans, flax (linseed), oats, wheat, rye ...). The waste straw left behind on the field is the remaining dried stems and leaves of the crop with limited nutrients which is either chopped and spread on the field or baled for feed and bedding for livestock.
- **A beet harvester**
- **A bean harvester**
- **A cotton picker**
- **A forage harvester** (or silage harvester)
- **A potato digger**
- **A sickle** is a curved, hand-held agricultural tool typically used for harvesting grain crop or cutting grass for hay.

## Hay making

- **A mower** is a machine for cutting crops or plants that grow on the ground. A smaller mower used for lawns and sports grounds (playing fields) is called a lawn mower, which is often self-powered, or may also be small enough to be pushed by the operator. Larger mowers are used to cut grass or other crops and place the cut material into rows - windrows.
- **A hay tedder** is a machine for making hay. It is used after cutting and before windrowing. It is used to turn or scatter the hay in order to aerate the hay and speed up the process of drying as well as results in improved aroma and colour.

- **A hay rake** is used to collect cut hay into windrows for later collection (e.g. by a baler). It is also designed to fluff up the hay and turn it over so that it may dry. A hay rake may be mechanized, drawn by a tractor or draft animals, or it may be a hand tool.
- **A baler** is a piece of farm machinery that is used to compress a cut and raked crop (such as hay or straw or silage) into compact bales and bind the bales with twine. Bales are easy to handle, transport, and store.

### **Loading**

- **A loader**
- **A hay loader**
- **A trailer**

### **PRACTICE:**

#### **1. Answer the questions:**

1. List the main groups of agricultural machinery.
2. What are the main tasks of a tractor?
3. Describe the machines used in the process of soil preparation for planting.
4. Which machines are used for fertilization?
5. Explain the terms irrigation and drainage.
6. Describe the machines used in the process of haymaking.

#### **2. Translate:**

prezračiti prst	namakanje	žetev	orodje	rahljati prst
oranje	oprema	hranila	priključek	površje