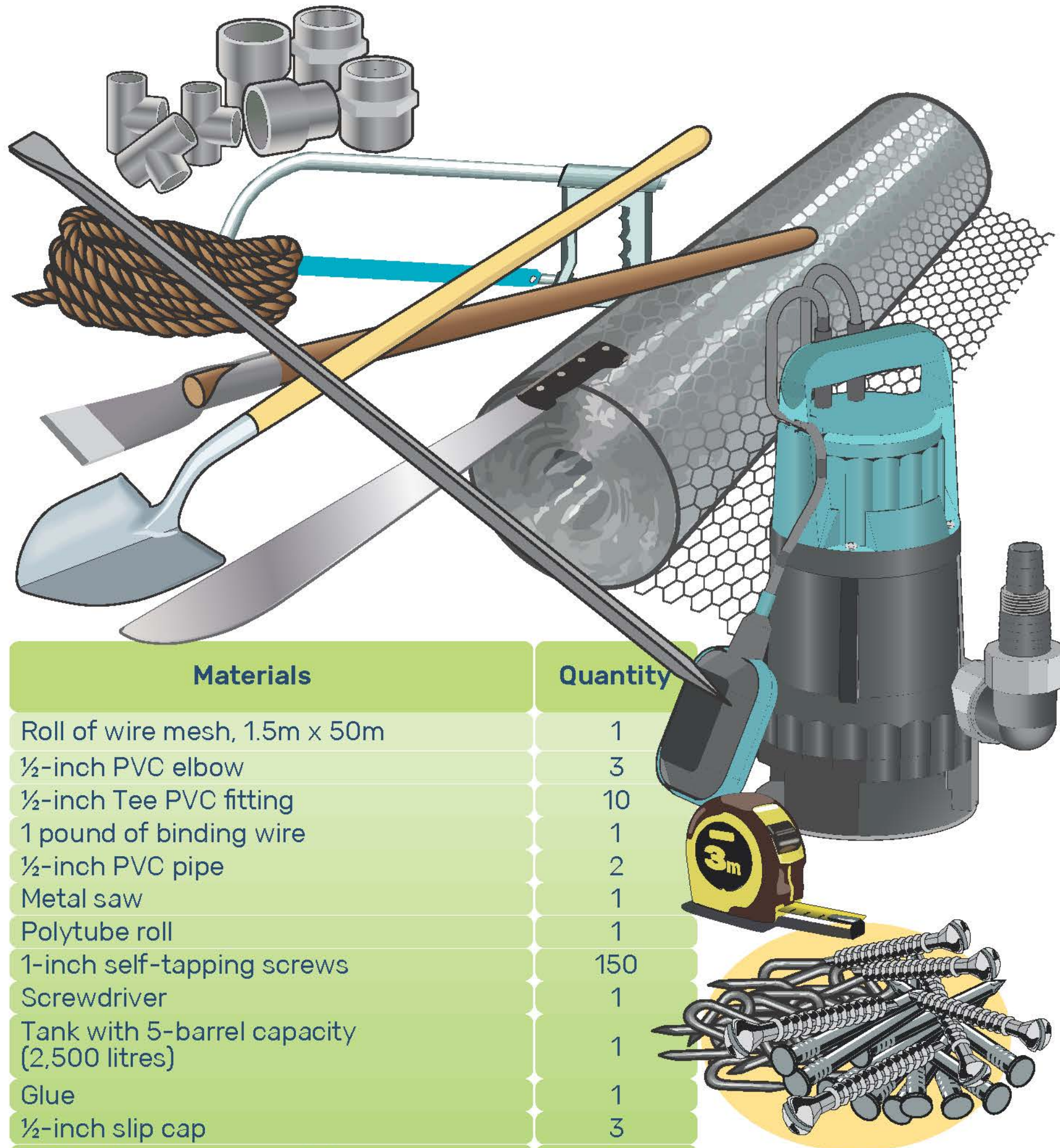


Drip irrigation

It's an easy to manage system with quick installation that can be used to plant during the dry season or when rains are not plentiful.

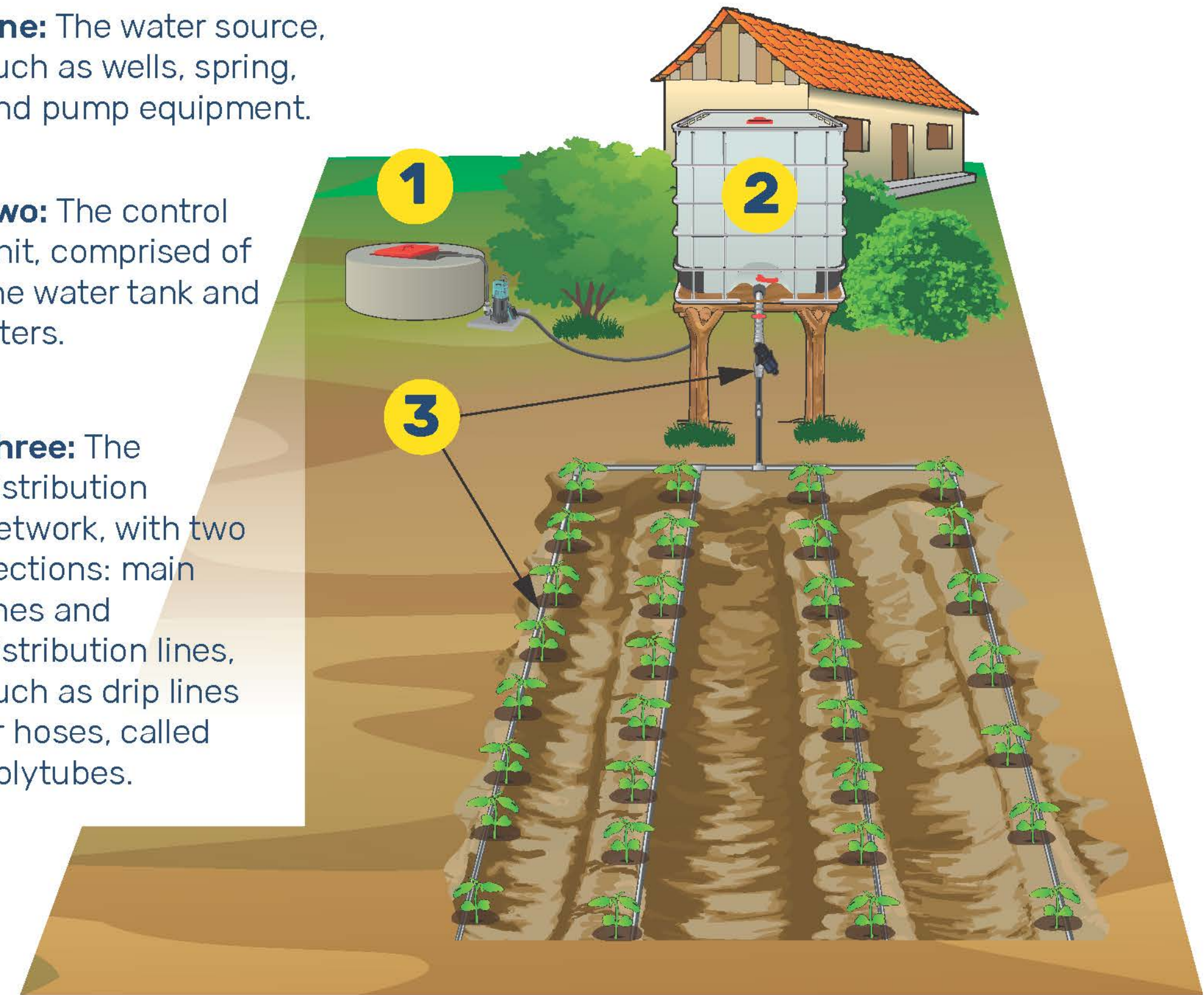
Tools and materials required



Materials	Quantity
Roll of wire mesh, 1.5m x 50m	1
½-inch PVC elbow	3
½-inch Tee PVC fitting	10
1 pound of binding wire	1
½-inch PVC pipe	2
Metal saw	1
Polytube roll	1
1-inch self-tapping screws	150
Screwdriver	1
Tank with 5-barrel capacity (2,500 litres)	1
Glue	1
½-inch slip cap	3
2 ½-inch pressure regulator	1
2-inch female adaptor	1
Pliers	1

The three parts of a typical drip irrigation design

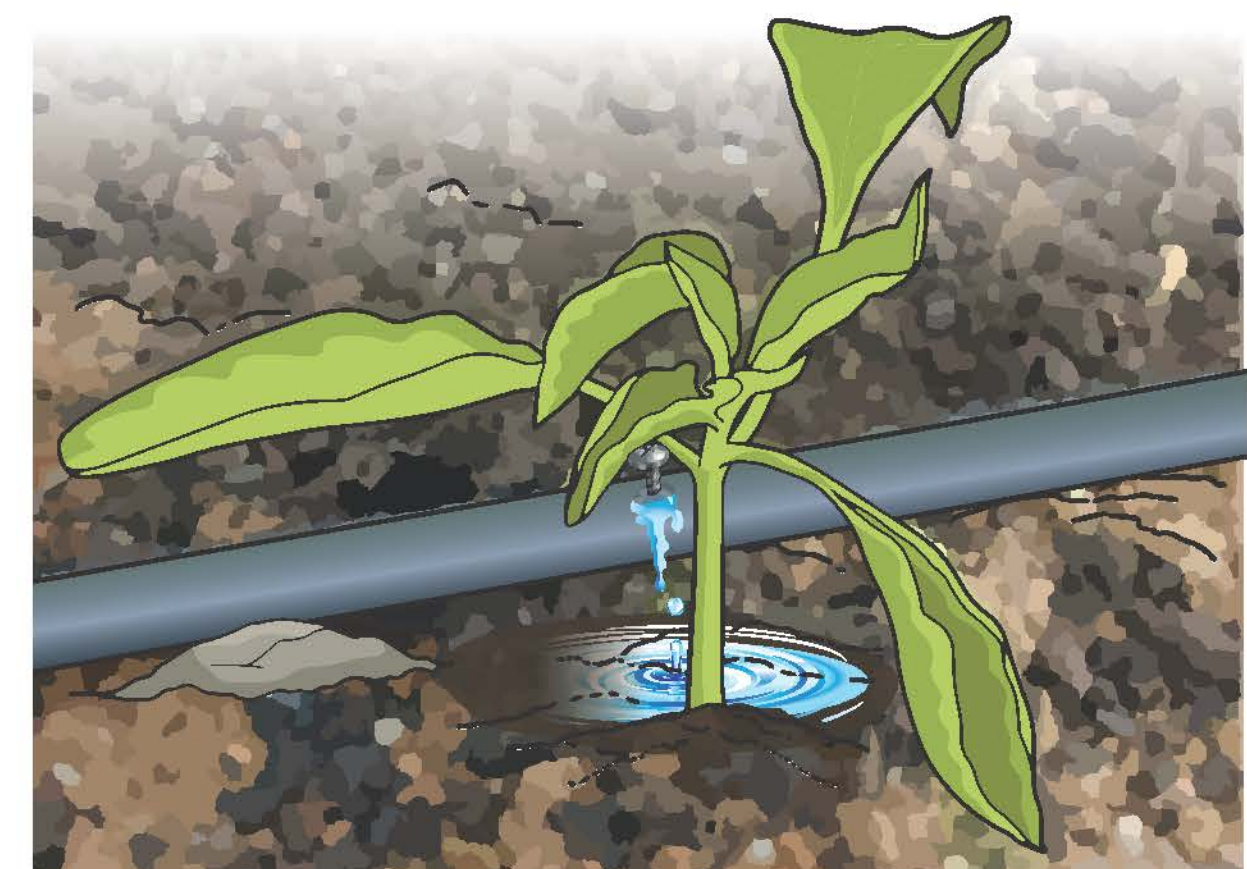
- **One:** The water source, such as wells, spring, and pump equipment.
- **Two:** The control unit, comprised of the water tank and filters.
- **Three:** The distribution network, with two sections: main lines and distribution lines, such as drip lines or hoses, called polytubes.



How much water do you need to tend your garden?

A screw dripper emits between 2-10 litres of water per hour.

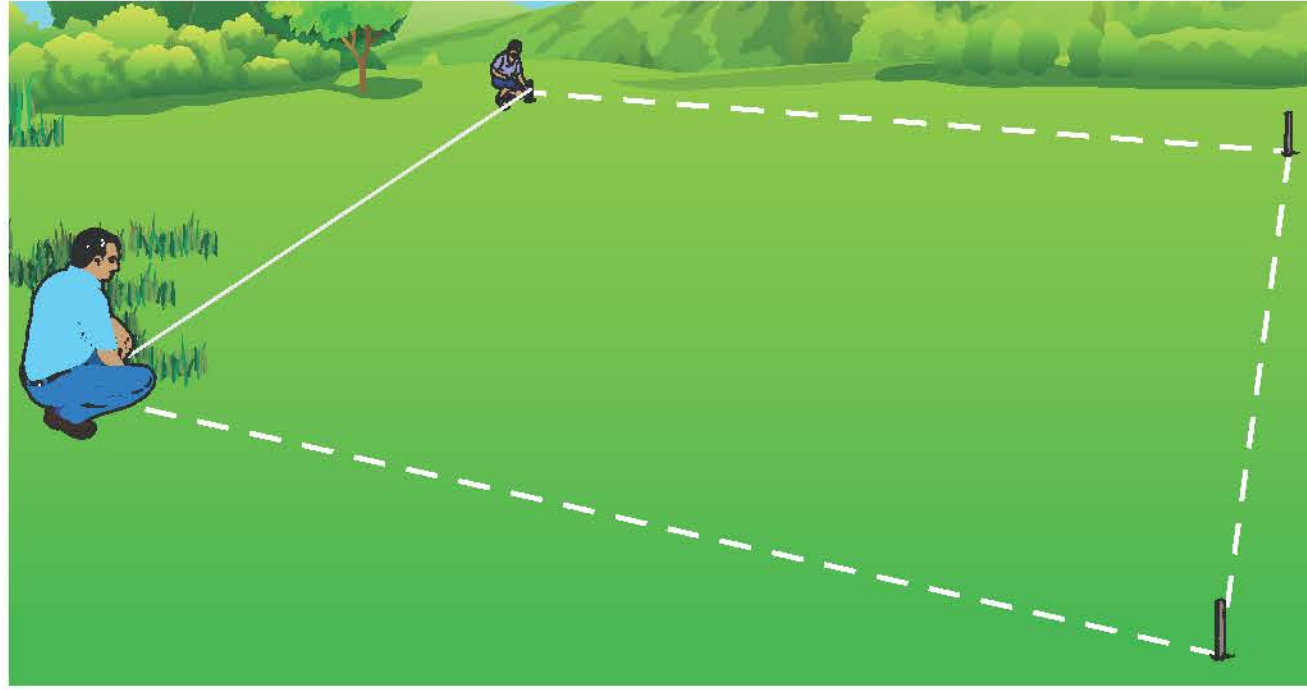
With this information and knowing the water needs according to the vegetables or fruit trees, calculate the water per day needed to irrigate the garden.



Step by step: Installing a drip irrigation system

Step 1

Measure the area where the garden will be planted.



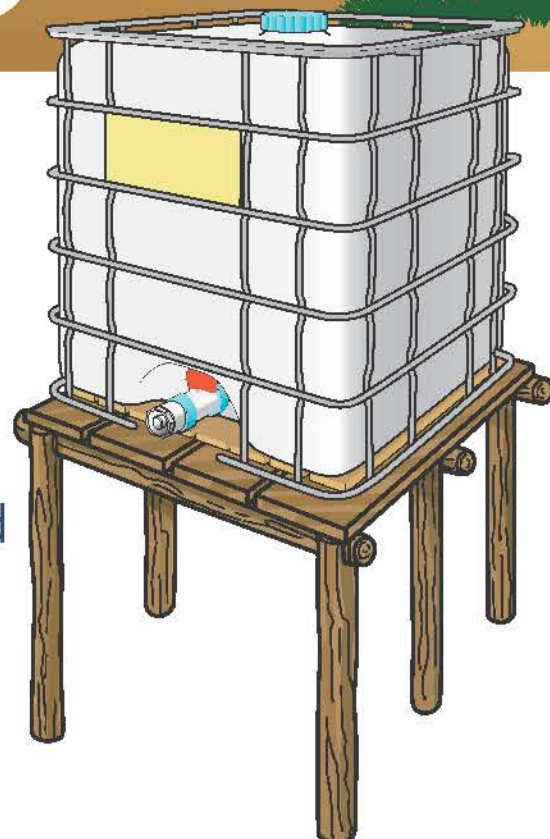
Step 2



Fence it with posts and cloth or chicken-wire, to protect it from animals.

Step 3

Determine the place where the water tank will be installed, and build a platform for it ½-1 ½-metres-high.

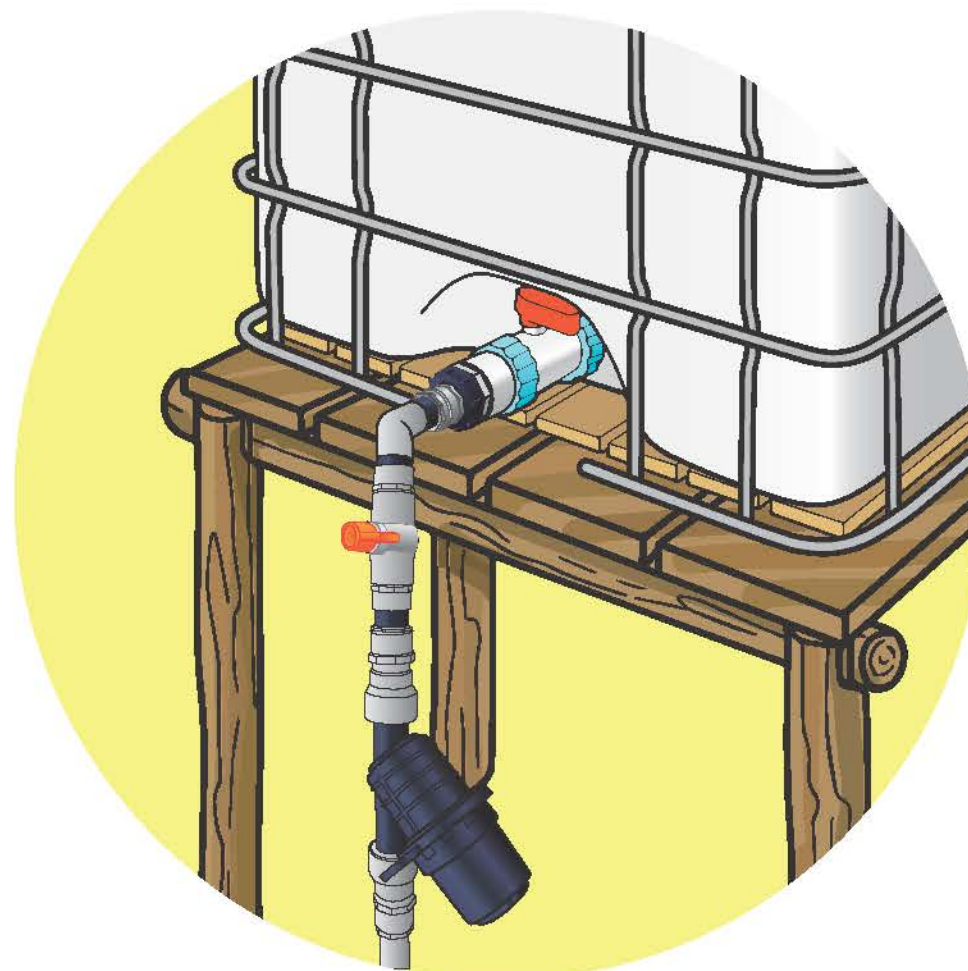


Water needs according to the vegetable stage

Crop	Early stage (lt/m ²)	Development stage (lt/m ²)	Middle stage (lt/m ²)	Final stage (lt/m ²)
White onion	4	5.6	8	8
Cabbage	6	6	8.4	7.2
Cucumber	3.6	5.6	7.2	6
Marrow	3.6	5.6	7.2	6
Bell pepper	2.8	5.6	8.4	7.2
Radish	3.6	4.8	7.2	7.2
Tomato	3.6	6	9.2	4.8
Carrot	3.6	6	8.4	7.2

Step 4

Place a PVC pipe at the base of the tank with its shut-off valve and filter, following the technical recommendations of an expert.



Step 5

Install the network of tubes, hoses or drip lines that take the water to the beds or benches.



Step 6

The lateral distribution layout with drip lines or polytubes is pegged down with stakes and wires over the beds or benches. The self-tapping screws which will serve as drippers or emitters must be spaced according to the spacing of the plants.

On installing, make sure they drip.

